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## Around the World Travel Letters

By Frederic J. Haskin

### RUSSIA

some of her mother's belongings, and found among them a little vessel containing water which had kept for ten years in a perfectly pure state.

I was told of an extraordinary practice used in establishing boundary lines between landowners, which was interesting on account of its originality. After the

where it had occurred, so that in after years if a dispute should arise they could give evidence with some degree of accuracy. This was rather rough on the boys, but if called upon later they had the satisfaction of having their decision accepted by both parties and regarded as final.

Other instances of official procedure

about the volume of traffic going over the various roads. A detachment of registrars were ordered to be placed at every cross-way during six days of each month. These officials were to make a report of every peasant cart that passed, as well as an estimate of the weight of its cargo. After a census had been taken of one district the commissioners were ordered to apply the same process to another. At the end of three years two districts had been reported upon. Inasmuch as there were eleven districts in all, nearly twenty years' time was consumed in making the preliminary estimates. The traffic was hindered by official red tape during all this time, and in the end the roads remained as bad as ever.

The rules governing a session of one of the communal assemblies are unusual. It is a sort of village parliament, presided over by an elderly citizen whose badge of office is a small medal attached to a brass chain which he wears around his neck while on duty. It is his business to quell any minor disturbances that may occur, and to report the result of a vote on all questions that may arise. The usual way of deciding a question is to arrange the opposing factions in two groups, those who agree going to the right, and those who dissent to the left. The will of the majority is always final. The vote is not always taken by forming groups, however, as on one occasion, when the issue of renewing a grog-keeper's license was before the assembly, the applicant for a renewal of privilege passed around the drinks to the men present. The master of ceremonies carefully noted the number of those who accepted the treat, as well as those who refused, and based the decision upon the count.

There are many spirited scenes at these village assemblies, especially when the affairs of women are involved. The peasants have small regard for the intelligence of all womenkind, and believe that they deserve very little consideration. But when a man dies, or is disabled, his wife becomes the head of the household, and is entitled to speak on such subjects as concern her family. The amount of land that the members of each household shall cultivate is regulated by the assembly, and the proposition to increase the amount of a widow's holding, with the taxes that must accompany it, often brings forth dramatic scenes in which the woman will lash her male opponents with invective and appeal to the crowd for support. On these occasions those of the men who have small appreciation for the wit of woman, and venture to make any complimentary remarks, are pretty likely to be repaid with interest by pertinent references to their own domestic affairs. In cases where the men are obdurate in their contention, the woman always has resort to the last pathetic appeal of tears, and that is not an easy argument for even a Russian peasant to answer.

One pronounced characteristic of the Russian peasant is his utter lack of the quality of imitation. If a thrifty German happens to locate near a Muscovite the latter is certain to show some curiosity as to the methods of his neighbor, but rarely ever profits by the examples of thrift which he may see. He regards the German as an extraordinary person whose qualifications are quite outside of his ability to emulate. This feeling seems to be grounded on the conviction that whatever the foreign settler may do to make life more comfortable and profitable is the result of some decree of fate that does not apply equally to the Russian. It seems to him as natural that the German should eventually have a warm, commodious house as that a bird should build its nest,

[CONCLUDED ON PAGE 5]



READY FOR A HOLIDAY

location of the line had been determined, the method of registering it was to collect a lot of small boys at the division point, whose fathers proceeded to give each of them a sound thrashing, the idea being to give the youngsters such a drubbing that they would never forget the exact locality

are worthy of mention. Once when some new roads were to be built in a certain section, the officials in charge of the preliminary arrangements managed to prolong their deliberations until their salaries had consumed the entire appropriation. Their method was to raise a question

WHEN one has the privilege of seeing how the people of other nations live, the contrast between their ways and what he is accustomed to at home recalls to mind what an old Quaker once said to his wife: "All the world is queer but thee and me, Martha, and sometimes methinks that thee is queer." If this old fellow could have taken a trip through Russia his conviction as to the singularities of mankind would have been strengthened, for the Muscovites have many customs that seem odd when compared with our views of life.

On account of his ability to withstand cold, the Russian peasant has been called the first cousin of the polar bear, but unlike the denizen of the north, he is not inconvenienced by exposure to great warmth. He has the faculty of being able to go from one extreme to another without inconvenience. After hours of exposure to the cold, during which time he has become so numb that he can hardly move, a Muscovite will enter his house and climb on top of the broad oven to thaw out. There he soaks in the heat until it seems that he will surely roast. If a person brought up in a temperate climate should do such a thing, the change would certainly kill him.

There is a Russian proverb to the effect that what is health to a Russian is death to a German, and the manner in which the peasants go in for extremes of heat and cold fully bears this out. They take vapor baths in a manner that could not be endured by persons of any other nationality. After withstanding the highest temperature of heat they will often rush out of doors and roll in the snow. The peculiarity of this weekly boiling out is that it is generally taken in the same oven where the bread is baked. Aside from the physical cleansing it has a religious significance, and is generally taken on Saturday evenings. The person performing the purification is extremely careful not to do anything of a contaminating character until after attending worship.

The Russians are an extremely religious people and have countless sacred ceremonials in connection with their everyday life. The first of May is the day when all the horses and cattle are blessed. It is necessary to keep the animals confined during the winter months, because the ground is covered with snow and there is no grazing. They are released when the snow begins to melt in the spring, but no farmer would think of turning them out until they have been blessed.

The ceremony of blessing the fruit occurs in August. This takes place at the church and is accompanied by a big service. The scene resembles a fair, inasmuch as samples of fruit are arranged in booths. At the conclusion of the ceremony the priest sprinkles holy water over those present. During this part of the service each person holds several apples in his hands, and there is great rejoicing among those who are fortunate enough to have drops of the holy water strike their fruit. It is taken as a certain sign that the owner will have luck in selling his crop.

The blessing ceremony is applied in many forms, and occurs frequently throughout the year. In January the waters are blessed. At this ceremony priests dip the cross in the water three times in order to drive away evil spirits. This rite is always witnessed by immense crowds who come with cups, pans, pots, and all kinds of utensils to carry some of the holy water home with them. A Russian woman told me that although she could not offer an explanation it was nevertheless true that the water saved after the annual blessing of the Neva did not spoil nor evaporate. She said that when moving recently she had occasion to pack



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## Comment

### Packers and Cattlemen

FROM the great scare raised about the agitation of the meat-inspection question injuring the live-stock industry, it is evident that the packers tried to work the game of getting farmers and stock raisers to help them in their opposition to effective meat-inspection legislation. Under the circumstances, but especially under the bear club of the packers, it is true that there may be a temporary depression in the prices of live stock.

But live-stock producers should remember that frequently in the past they have, with good reason, made louder complaints than the meat consumers against the packers. Time and again have they complained that prices of live stock were forced down below the real value, and that their business was at the mercy of the packers' greed, and they should have expected to see the "bearing" process in active operation at this time of investigation and exposure.

Again they should consider that the success of the live-stock industry in this country does not depend on the slaughtering of animals and handling of meats under unsanitary conditions, or on the selling of embalmed beef, dyed sausages, or "deaconed" calves as potted chicken.

In this matter the interests of live-stock producers and meat consumers are alike. A prompt and rigid application of a thorough meat-inspection law is necessary to restore the confidence of consumers, both domestic and foreign, in the quality and wholesomeness of our meat products, and to increase the demand for them.

Let us not forget that whatever harm has been done to "business" by the agitation of this question is not due to official

exposure of evil conditions, but to the evil conditions themselves, and for the existence of which the packers alone are responsible.

Speaking of the packers and their cry about ruin to the live-stock industry, Congressman Ames says:

Not content with the shameless acquisition of countless fortunes from tainted sources, safe in their belief of their own immunity, arrogant in their escape from the processes of the courts, violators of our laws against illegal combinations, spreaders of the white plague, slaughterers of humanity in order to save a paltry two millions, by threats of lowering the price of cattle they would drive their very victims to their own defense and risk, yes, bring ruin to every cattle raiser in the land.

### Foster Dwight Coburn

A wave of gratification swept over the country when it was announced that Governor Hoch had appointed F. D. Coburn as a United States Senator for Kansas, to fill an existing vacancy. He is the type of man for the times, the kind the people want in the Senate, and intend to have the first chance they get to replace some of the eminent members who now misrepresent them. The appointment seemed admirable in every way, and was approved far and wide.

Surprise and regret followed soon, when Mr. Coburn declined the appointment. Politicians and plain people alike were amazed that an able and successful man of affairs should refuse to take a seat in the United States Senate. But Mr. Coburn is a remarkable man, who has no "interests" to serve except the true interests of his countrymen, and he is, doubtless, absolutely honest in his belief that he can serve them better as Secretary of the

mains in the penitentiary. The gist of the decision is:

A man may lie in a business deal, and if the lie is so absurd that common sense readily would disclose the false representation he may escape the penitentiary. If he misrepresents the facts and obtains money through methods not readily comprehended, he is guilty of felony and will have to serve a sentence in prison. He cannot plead that if the person defrauded had investigated thoroughly the manner of parting the victim from his money he would not have been deceived. Representation made with the design to cheat is felony.

*J. C. Barnett.*

\* \* \*

### Agriculture in the Rural Schools

DR. BAILEY, Dean of the Agricultural College, at Cornell, talked to the Niagara County Farmers' Club at its May meeting about agriculture as a study in the common schools. His ideas did not seem to find the general attention they deserve. In my estimation they prove Doctor Bailey to be an independent thinker and a leader. He is not carried away by this fad of introducing agriculture as a study into the common schools. While our common schools now are of increasing efficiency, and better than they ever were before, yet he holds that they have not reached the limit of their growth, and especially that they should be brought in touch with the community and with the activities of the community. First of all, he believes in fundamental education. There is no place in our rural schools for professional studies of any kind. The charge is made that our schools are overflowing with fads. We should rather have fewer subjects than more. But each



FARMER COBURN OF KANSAS, WHO DECLINED TO BE UNITED STATES SENATOR

Kansas Board of Agriculture than as a United States Senator. Frankly and modestly he says:

I am extremely fond of the work and the position with which the people of Kansas have entrusted me for so many years, and if continued in their service at all, no other can be so acceptable.

Although his decision is a disappointment, because it is a case of the man refusing the office when the office sought the man, Mr. Coburn will not lose his place in the hearts of his fellow-citizens.

### Let the Swindler Beware

It is often said that there is no law against lying, and that the rule of "Let the buyer beware" should govern all business transactions. But it is now clear that it depends on the intent of the business liar and what he accomplishes by lying whether or not he is amenable to law.

The Supreme Court of Missouri recently handed down an important decision in a case involving the sale of shares in a stock company through false and fraudulent representations. The promoter re-

study and subject might be taught in the rural school in such a way as to bring it in some relationship to rural activities. In geography, for instance, the prevailing study takes the child to South America, to Asia, Africa and Australia, to be told about the anaconda, the tiger, the lion, etc., but nothing is said about the sheep, the horse or the cow. The arithmetic problems brought up in the common schools are all city problems, relating to merchants and middlemen. Nothing is said in the books about problems of labor, rations, rural partnerships, crops, butterfats and the dairy problems. In reading, every subject is touched except what closely touches the interest of the rural community. Many things relating to agriculture might be introduced with advantage in the reading course, such matters as peach growing, potatoes, in fact anything relating to the common everyday rural problems.

The trouble now is the absence of textbooks compiled in accordance with these ideas. Doctor Bailey asserts that geography and arithmetic and reading, as also manual training, drawing, etc., could and should be managed in such a way as to revolutionize agriculture in ten years.

"Wherever there is a human problem," said Doctor Bailey, "there is a place for leadership. If the changes spoken of should come to pass in the rural schools, the leadership will come from the country, and there is really no greater opportunity for leadership than in the open country."

### Fortunate Farmer

In these days, when suspicion, well-founded or otherwise, attaches to and surrounds almost all the food products in the open market—the meats coming from packing-houses, the groceries put up in fancy packages, the store vinegars, table oils, etc., not to speak of sausages, head-cheeses and other mixed messes of unknown and uncertain composition—the person who has to buy all his provisions may well ask when he sits down to take his meal, "What is there that I can eat with safety and perhaps with some remnant of appetite?"

The stories recently published about certain occurrences in meat-packing establishments are well calculated to turn a weak stomach inside out. There seems to be no other alternative, however. Either choke down your feelings of nausea and disgust and eat what is set before you, clean or nasty, but at least flavored with suspicion—or starve. The farmer alone enjoys an exceptional and very fortunate position. He may sit down to his table and be absolutely sure that what he eats is the genuine article, and clean. If it is not, nobody is to blame but himself. I may partake of pies or pastry without fear that the lard used in these things is of the "Philadelphia clarified" kind, which about fifteen years ago was proven to be made in one establishment from hogs that had arrived from the West sick or dying or already dead, and that were dumped with all the manure and filth adhering, and together with the entrails and other offal from the slaughtered sound animals, into a big steam tank.

I may sit down to a dinner of chicken or veal potpie without the least suspicion that my "chicken or veal-loaf" was cooked in the big caldron in Chicago in which the flesh of the boy, and later of his father, both of whom had accidentally fallen in, was said to have been used as material for such dainty dishes. I can eat eggs knowing that they are strictly fresh, and laid by healthy hens fed on sound food, not on the putrid carcasses of animals having died from disease, or use milk and cream that I know to have come from healthy cows.

I have my own home-grown vegetables and fruits, and know them to be fresh, clean and of choicest quality. There is no occasion for squeamishness in my case, and it need not be in the case of any sonable care in handling and milking can make them.

*T. Greiner*

\* \* \*

### Good Management

ONCE asked a farm-hand how his employer succeeded in doing so well when he only worked ten hours a day.

"It's all in the management!" said he. "If I had sense enough to manage as well as he does I would be the owner of a farm now instead of working by the month. I think he is the best manager I ever saw. The work goes on as steady as a clock on his place. There seems to be no rush at any time, but I know I am doing better work and more of it on this farm than I ever did in my life. He has every implement fixed to do the best work it will do, and I can tell you it is a great satisfaction to work with them. Then he is the best stock feeder I know. He feeds the horses just enough to keep them even. They are not fat as butter in winter and poor as crows in summer. When at work they have full feed, and when they stop, the feed is cut down at once. He seems to have more sense about these things than anybody I ever met. The fact is, he is a real cracking good farmer!"

This fact is getting plainer every day: That it is not brawn but brain—active brain—that makes the most successful farmer of to-day. And we should keep in mind the fact that active brains are not found in an overworked body.

*Fred Grundy*

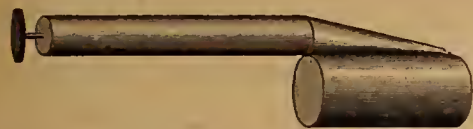


## About Rural Affairs

### Protecting Farm Animals from Flies

A KENTUCKY reader asks what to spray cows with to protect them from flies, and what sprayer to use. Vicious dogs came into his yard and bit one cow's tail off, leaving only a short stub. The first sprayer should be a good gun to spray a load of coarse shot, with sufficient powder behind it, in the direction of the dogs. While the tail is undoubtedly given to the cow to enable her to switch the flies off, every cow in the land, whether she has a complete caudal appendage or not, should be protected in some way against the fly pest. In fact, she will not give her full flow of milk without such protection. I know of no mixture, however, that could be guaranteed to be an absolute fly repeller.

In fly-time, cattle are bound to be pestered more or less, but there is no earthly reason why we should let them be tormented without making determined efforts to give at least partial relief, and enable the animals to take some comfort. Almost all country stores, and surely every city hardware, seed or supply store, keep



cheap tin sprayers for sale. I bought one recently for fifty cents. Where cows are kept in considerable numbers, a knapsack sprayer might be used. I spray cows, calves, horses—in fact every animal liable to be tormented by flies and mosquitoes.

Various fly-repelling mixtures are being advertised for sale. I have not found them more effective than a preparation that I can make myself out of comparatively cheap materials. For the bulk or main part, nothing is better perhaps than fish-oil. The trouble is to get it. It is very cheap when bought by the barrel in New York, or any other large sea-coast city. But country stores do not keep it. Once I tried in vain to find it even in Buffalo, which is a fairly large inland city. The disagreeable smell and the adhesiveness of the fish-oil give it a particularly lasting effect. When I cannot get it I use crude petroleum. Even this, however, is not readily procurable in country towns. I always try to keep some on hand, as it is quite handy for many purposes. It costs me eleven and a half cents per gallon by the barrel. To the gallon of either this or the fish-oil I add about a gill of oil of tar, which costs me about seventy-five cents a gallon, and a tablespoonful of crude carbolic acid. Usually I also add some kerosene oil, and in the absence of both the fish-oil and the crude petroleum kerosene might be used for the bulk. All these materials are cheap, and spray we must or suffer loss.

### More Vegetables, Less Meat

We always have been a nation of meat eaters. Recent developments, the details of which it is not necessary to mention, point in the direction of a great increase in the consumption of vegetable foods and a corresponding decrease in the use of meats and meat products. Such a change is not to be regretted. I myself have usually the best appetite and feel most comfortable when I eat meat but once a day, and very little then, and subsist mostly on cereals, vegetables and fruits. My sympathies are therefore all with the gardener, and I have none to waste on meat packers. I should be disappointed if the demand for the general run of vegetables will not be much larger this season than ever before in our history.

### Preserving Eggs

It usually requires several years' experience to settle on the real merits of new things or new methods. This will also be the case with the new water-glass method of preserving eggs. We often think we have it, and then again we don't. In my first trials the eggs kept for many months so perfectly that the preserved eggs could be served soft boiled (a most critical test), and could not be distinguished in flavor from a new-laid egg. Last winter our eggs preserved in liquid glass in the same manner were good enough for all the purposes of baking and cooking, and we were very glad that we had them, but we could not use them (or at least the last half or third of them) for the table, especially when soft boiled. They had a decidedly "off" taste. This shows that we do not yet know all about this

method of preserving eggs that we should know, and that we will have to continue experimenting for a while. It seems safe to say, however, that the method is valuable. Buy a pint of liquid glass (water glass, silicate of soda). Dilute this with nine pints of boiled and cooled water and put it in an earthen crock that can be kept covered. Into this liquid drop the eggs from day to day as freshly laid. Keep in a cellar or other cool room.

### Belgian Hares

A California reader wants information "on any publication devoted to the raising of Belgian hares." To tell the truth, I have not seen much on that subject in any agricultural paper lately. The poultry and pet stock journals used to give a good deal of Belgian-hare literature. But it seems that there is now very little public interest in this once so persistently boomed animal, and little is said about it, either in praise or otherwise. Its real friends, who had expected to push it gradually into its well-deserved place as a regular article in our meat and supply shops (as it makes indeed a good and palatable dish), have been as much mistaken and disappointed in their fond hopes as those who, condemning it on general principles and without knowing anything about its nature and qualities, predicted that with its wonderful prolificacy it would soon overrun the country and become a pest worse than the rabbit in Australia. Diseases, especially among the young stock, have developed or spread in the last fifteen or twenty years and we have been unable to control them, so after having raised Belgian hares for a quarter of a century in this country, and long before that during my boyhood days, I have given the job up as unprofitable.

### Planting a Place

"It's never a mistake to plant a few trees," said Mr. E. A. Long, the expert landscape gardener, to me the other day. Right in this vicinity we have several



FOUR FARM FAVORITES

instances of the increased selling value of a place consequent upon the planting of trees and groves. Our own community is in a state of transformation from a rural town to a city. Consequently much property is sold in lots for building purposes.

Right close to me is a tract of land on which a former owner planted a lot of small street trees in nursery rows. Now they have grown to be quite good-sized trees, and altogether into a respectable grove. A city man was attracted to this spot by this grove, and purchased the property for a good price, then built a fine residence close to the grove.

Mistakes can be made in planting, as, for instance, in setting trees where they are not wanted, or planting such things as certain poplars which spread all over a place and become a serious nuisance. But ordinarily it is much easier to cut down a tree than to grow one of fair size in two or three years. The mistakes of planting can be repaired. The mistake of not planting will be felt for many years. Premises without tree growth are desolation—shadeless, cheerless, an abode perhaps, but not a home.

*E. A. Long*

"Cedar, and pine, and fir, and branching palm,  
A sylvan scene, and as the ranks ascend  
Shade above shade, a woody theater  
Of stateliest view."

## Salient Farm Notes

"Life let us cherish, while yet the taper glows,  
And the fresh flow'et pluck ere it close;  
Why are we fond of toil and care?  
Why choose the rankling thorn to wear?"

### Live in the Present

BEFORE me lies a letter from an old farmer I give a portion of it to show the drift of the whole

"It seems to me that times have changed much for the worse. Nowadays it seems that all people think about is putting on style and living beyond their means. When I was young we never thought of fancy buggies, silks and broadcloth. The neighbors all mixed together and we had good, happy old times in our plain clothes, and nobody tried to outswell others with finery. Now the youngsters must go to town to get educated in more style, and belong to five or six clubs and societies, and they come back and turn up their noses at us old plain folks, and it seems like all they want is more money to spend for more finery. It seems to me that I would like to go somewhere to get among the good, old, plain folks we used to have here, and neighbor with them in our plain clothes as we used to do in old times."

This good old man is a fair specimen of the thousands whose sole pleasure is found in living in the past—who live over again the days when they were young and strong and the farmer was a clodhopper. The soil was then new and very fertile, and good crops could be grown with the crudest sort of farming. The farmer was a plain man who took pride in his plainness, and whose diet consisted principally of bacon and beans, with "biled" turnips and cabbage and stewed pumpkin as rel-

I found out I am getting old. I do the milking, and I used to plunk my stool down, milk, and pop up and go to the next cow. Well, one morning I went to get up with the pail of milk and somehow my legs gave way and I sat down again. I set the pail to one side, hooked my hand over the cow's back and helped myself up. I said nothing about it, but I've had to do the same thing ever since. I got my feet tangled in a little straw this morning, and instead of springing out of it like I used to I went down like a thousand of brick." He said he began to fear that he had about played his little drama. I told him not to think of it for a moment, but to keep up with the times, do less hard work, take more rest, read more, plan for the future as he always had done, take a lively interest in all that was going on, and especially in the young people and their hopes and aspirations, and he would remain young in mind and be right good company to almost anybody, no matter how stiff and weak his limbs became. He said he believed it was just the thing to do. He lived about twelve years afterward, and not for a moment did his interest in the progress of the world, especially in things agricultural, abate. In his last days he became so weak that he had to be assisted in almost every movement, yet his daughter said it was a pleasure to wait on him, because he was always so good-natured, and always poking fun at his own infirmities, and she missed him sadly after he went away for good.

### Overwork and Long Hours

And this recalls another matter. This old farmer told me that he was well satisfied that he had broken himself down "long before he should have went to pieces," by overwork and long hours. He had worked twelve to sixteen hours a day, and many a time kept at it when he was so tired he could scarcely get one foot before the other. He failed to take the rest he really needed to keep up his strength and health. Looking at the matter when he had to sit down and rest to live, he declared that it was the most foolish thing he ever did. He was ambitious, and desired to be a large landowner and to be considered wealthy. Had he been satisfied with a nice little farm and a modest home he could have gotten vastly more pleasure out of life as he went along. Many times I find myself wondering why farmers should be compelled to work hard twelve to sixteen hours a day when men in almost all other vocations consider eight hours a day quite sufficient in which to make a good living. Are such long days necessary on the farm?

When I was a hired man I worked at one place where I was invariably called promptly at four o'clock in the morning, and I went to bed immediately after my nine o'clock supper. That farmer died a poor man. At another place I was called at five in the morning and had supper at six in the evening. The last I heard of that farmer was that he had retired and was living at ease in town, and a nephew was working the farm on the most liberal terms I ever heard of. I am well satisfied that farmers can do better work, both mental and physical, by working ten hours a day than longer, and the most successful farmers I know do this. When a man slaves his muscles to almost paralysis is it likely that his brains are capable of doing good work? Good and profitable farming requires brains in this age and time.

*Fred Grundy*

"Softly sweet, in Lydian measures,  
Soon he sooth'd his soul to pleasures.  
War, he sung, is toil and trouble;  
Honor but an empty bubble;  
Never ending, still beginning,  
Fighting still, and still destroying.  
If all the world be worth the winning,  
Think, oh, think it worth enjoying;  
Lovely Thais sits beside thee,  
Take the goods the gods provide thee."

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## Is Farm Life Lonely?

"How do you stand it, away out there on the farm? Seems to me I should get so lonesome I would die!"

That is the way more than one city person has spoken about what he is pleased to call the monotony of life in the country. It simply shows how little these dear folks know about the real life of the farm. Farm life lonely? Well, just come out and follow the farmer man or his wife through one single day and see what you think of it then. What would you think of a day like this, for example? And let me say that this sample day may be duplicated in the experience of hundreds scattered up and down the land.

At five o'clock the man of the house rubs his eyes open. A voice at his side dreamily asks, "Wasn't that our ring?" Scrambling out of bed, he finds that the man at the other end of the telephone line wants to know if he will send one of the children up the road half a mile or so to tell John Smith that threshers will be at his house to dinner that day. Of course he will do it. Nothing like the telephone to save work—for the other fellow! Out tumbles the Little Chap, not without some kicks at this errand through the early morning fog. Hard to see where he is to get anything out of this trip before breakfast. The farmer dresses and starts the fire and goes out to milk, while his wife gets breakfast.

The air is fine this morning. It braces the farmer for the work of the day. He forgets the summons over the 'phone and comes back from doing the chores feeling fine—appetite good. Wife has a meal fit for a king on the table. Everyone is well and happy. The day promises well. The porkers are fed, the calves given their morning meal, the cows turned away to pasture, and now the churning is to be done. The big boy goes away with the team to work. On the stone-boat he has the plow with which he is to turn over a piece of "new ground" this forenoon. The farmer is whirling the churn under the back porch in the shadow of the old apple tree, when suddenly he has a vision that brings him to his feet. Up in the field he sees the horses that went out half an hour ago in charge of his son, a most trusty boy, galloping at the top of their speed down through the pasture. No man is in sight. The stone-boat is fairly bobbing up and down behind the flying team. Soon the whiffletree gives way and the boat is left behind. The team rushes straight for a rail fence. A moment more and there is a smash-up. The horses disappear. One is down on one side of the fence. The other on the other side. By this time the driver comes running into sight. The farmer drops everything and hurries up to help disentangle the team. He expects to find both horses badly hurt, and is relieved when he finds that luckily neither the boy nor the team is the worse for the runaway. It appears that the boy standing on the back end of the boat slipped and lost his place. The movement scared the horses and they began to run. The boy lost his hold on the reins and away the team went. So the monotony of this forenoon is broken.

Another day the scene is changed, and the farmer with his son is backing the team into the barn. The horses are hitched to a wagon on which is a hay-rigging. The boy is standing on the wagon, when with no sign of warning down the sleepers of the bridge go, carrying team, wagon, boy and all. It is a fearful jar of the farm monotony to stand there and see the wreck and not be able to do a single thing to prevent it. The boy, with quick eye, seeing what is coming, makes a flying leap that lands him safely on the bank, but the horses fall to the bottom, some eight feet down, while the wagon is left hanging in mid-air, partly up, partly down. One horse is flat on its side. The other is trying to free itself from the "entangling alliance."

The farmer and his son rush around and get the team by the bridle, and the next half hour is spent in righting things up. Once more good fortune has been on the side of the farmer, and no serious damage has been incurred. It might easily have been otherwise, and all breathe a prayer that it has all "turned out as well as it has."

It is now dinner-time. The monotony is broken again by the appearance of visitors who have come too late for the good wife to "put in that extra potato." She must hustle around and do the best she can. The dinner over, the male member of the visiting company announces that he is in a bit of trouble and wants a word of advice. It is well on into the afternoon when this little council-of-war, or peace, as the case may be, is over and the farmer is able to go on with his own work once more. Farm life is so monotonous!

A wail comes from the barn now. One of the younger boys has been experimenting with the feed-cutter. He has suc-

ceeded so well that he has left part of one thumb between the cogs of the treacherous gearing of the machine. Hastily the odd horse is hitched up and away the mother and the boy drive to find the doctor. Meanwhile the farmer does what he ought to have done a long time ago; or rather what the manufacturers ought to have done for him when the feed-cutter was made, puts a covering of heavy zinc over the gearing, so that no other thumbs may go the same way. The monotony of that day will stick in the memory of the boy that had the honor of breaking it up as long as he lives.

But now the cows come trooping along the lane. They know nothing about the loneliness of the day, and have been going on their way untroubled by any of the annoyances that have come to us "civilized" beings. They only know that their udders ache from the pressure of milk and we must relieve them as soon as we can. The sun is well down out of sight behind the hills when the monotony ceases, and we go in to lie down and sleep once more.

But this is an unusual day? Yes. There are "off days" on the farm, just as there are everywhere. Days when everything seems to go wrong; but sandwiched in between there are days that are as bright and as sunshiny as the fairest June morning. But the loneliness? Oh, it is not here, kind friends of the city. That is only a fancy on your part, due to lack of positive knowledge. Every day on the farm is crowded full of things to employ the mind. I can tell you of men and women that have left the farm just because it was too strenuous for them. They felt the need of quiet and a chance to think. So they sold out and went away to the city to find rest. I feel certain that they made a mistake, for they did not know what they were doing when they made the change. Fences have a queer way of changing the appearance of the grass on either side. When you are on one side, seems to you as if you never saw such nice grass as there is over on the other side. Once you get over there, the green, lying knee-deep, is all back where you started from.

The conclusion of the whole matter is that to the man who is really alive, there is no such thing as monotony.

*Edgar P. Stewart*

## To Put Spike Nails in Hard Wood

To put a spike nail in or through hard wood, flatten the head of the nail so it won't turn, and place it in a brace, as you would a bit. You can bore it into any kind of wood.

I use this plan for putting nails through plow double-trees, the opposite way from the pinholes, to keep them from splitting. To finish, drive them down solid and clinch.

Illinois. S. A. WICOFF.

## Sowing Wheat

My experience with wheat has been that October sowing brings the best results, depending somewhat on the fall. If the fall happens to be wet, the last of October brings best results; if it is dry, the first of October will be better. I prefer my wheat drilled if the ground is suitable; if not, take a common shovel-plow and plow it in.

If the wheat is drilled, I use three hundred pounds of fertilizer to the acre, or some good stable manure.

Many people sow too much wheat to the acre. One bushel to the acre is plenty. Give the wheat a chance to start.

West Virginia. C. C. HUDKINS.

## Disking Land for Wheat

Wheat land, as every farmer knows, should be well packed underneath with enough fine, loose dirt on top to cover the seed well. This is one of the advantages of disking.

The land to be disked should be as clean as possible. If there is much trash it will clog the drill. I usually disk three times, lengthwise, crosswise and then lengthwise, splitting the ridges thrown up the first time.

In case of a heavy rain before sowing it will have to be run over lightly with the disk again.

After disking I use a three-horse steel harrow from two to three times, which makes the land ready for the drill. This gives the right amount of loose dirt to

cover the seed well, and leaves the land well packed below, and the stubble left on top of the ground helps to protect the wheat through the winter.

I find that wheat is less apt to be lifted from freezing and thawing where the land has been disked instead of plowed. Last fall I plowed some and disked some to see the difference. The wheat on the plowed land was lifted considerably, and is not a very good stand, while that sown on disked land was not lifted in the least and is a good stand.

Ohio. G. L. DARROW.

## Sowing Clover with Buckwheat

I have sowed clover with oats in the spring, and on the wheat-field in early spring for a number of times, and often found that I had lost my clover seed. In fact, I never got a real good set of clover with either of these crops.

A few years ago I sowed clover with buckwheat and got a good stand. This sowing was done in July. I have sowed clover and timothy with buckwheat a number of times since, and in every case except one I got a good stand of both clover and timothy. In that case the land was freshly plowed and a considerable coat of weeds were turned under. It set in very dry and the buckwheat crop was almost a failure, as well as the clover. I find that if the land has been plowed and well pulverized and allowed to settle for a few weeks before the buckwheat and clover is sown that the clover will stand a pretty hard drought, even where sown late in July. I sow the buckwheat with a common grain drill and use an attached grass-seeder which drops the seed just in front of the drill hose. About 150 pounds of a good grade superphosphate is applied to the acre.

The clover makes considerable growth before the buckwheat crop comes off, then the land is free from weeds and the buckwheat stubble protects the young clover so that it is nearly as large by the time that heavy frosts come as spring sowings. Sometimes I mix a part of the clover seed with the fertilizer, and the plants come in the furrows made by the drill. These furrows help to protect the young plants from hard freezing.

A. J. LEGG.  
West Virginia.

## Crimson Clover as a Fertilizer

Having about seven acres of poor, gravelly soil, and not having manure enough for it, I thought I would try sowing clover in the corn at the time of the last cultivation. I sowed one and one fourth bushels of red clover seed, and as we had plenty of rain there was a very fair catch on most of the field, but it seemed to make a very slow growth that fall. The next spring I saw that there would not be very much to plow under, so I decided to let it grow all summer, and plow the land for potatoes the next spring, but it did not amount to very much, as the soil seemed to lack what was necessary to make it do well.

Then I thought I would try crimson clover and see if that would do any better. I sowed about the same amount per acre on eight acres. After sowing we went through the corn with a one-horse drag-tooth cultivator to cover the seed. Owing to a heavy growth of pumpkin vines on a part of the field, we were unable to get through with the cultivator, and the seed was not covered and we had no clover. Where the seed was covered we had a fine catch on most of the field. It did not grow very large that fall, but the next spring it grew very fast. The last of May we began to plow it under for potatoes, and at Decoration Day it was in full bloom.

We planted the field to potatoes about June 20th. At the time the blight struck them they were as pretty potatoes as one could find anywhere.

Seeing that I could get a growth to plow under for potatoes by using crimson clover, I sowed eleven acres of corn last season, cultivating after sowing, and got a fine stand. I sowed about five quarts of seed per acre, but think that six or eight would be better.

I have never tried it on clay soil, but on a sandy soil I think it is the cheapest and best way to get humus in the soil. We do not have to lose the use of our land one season as we do in using red clover. In May I had clover, in September potatoes, and October 6th I sowed the field to wheat.

On our sandy or gravelly soil it is almost impossible to get a crop of clover by sowing in the usual way on wheat in the

spring. If the seed makes a good catch, the summer sun is pretty sure to cook it, as there does not seem to be humus enough in the soil.

By using crimson clover in the corn and then plowing for potatoes we can get it, but it will not do any good to plow the land for oats, as there would be so little growth that it would not pay.

Ohio. G. L. DARROW.

## Unproductive Soil

On many farms in Illinois, Iowa and Indiana, plats of soil are found which are not productive. Some of the old settlers call it "sour;" others say "it is poisoned." It is a black soil, containing much black sand, and is found on the edge of ponds, sloughs, and wet places that have been drained. It is very loose and does not pack; in fact that is the chief reason why it is not productive. It is so loose it dries quickly, and the plant roots do not obtain moisture enough to cause abundant growth. The stalks are weak and sickly, and of course the crop is light. If the owner will cover the surface of such spots of soil lightly with clay, or any soil that is compact enough to offer some resistance to a plow so that it will "scour," as we term it, he will find that there will be no more difficulty with his "sour" soil.

Illinois. U. S. ELLSWORTH.

## Dry Farming in New Mexico

Here on the Staked Plains we usually have a great deal of snow in winter, but the lateness of the spring rains prevent such crops as we raise by dry farming from getting a good start.

Breaking land in the winter-time is usually attended with great difficulty, because it is too dry to plow, except for a few days immediately following each snow. I always take advantage of the few days when the snow is melting, and harnessing up four horses, I keep plowing until the sweeping winds extract the moisture and leave the unplowed ground dry and hard.

My land is mostly sandy loam and holds moisture well, especially when well pulverized. I break my land as deeply as possible—from four to six inches. If the snows are unusually heavy and slow in melting I sometimes break several acres and then harrow it thoroughly. In case of light snows, followed by sunshine and wind, I never break more than a fourth of an acre before turning back and harrowing it down. Snowstorms generally come from the northeast, and when the storms are over there is a warm reactionary wind from the southwest that, with a few hours of sunshine, will dry out plowed ground to a depth of several inches. The finer the soil is made the better it will hold moisture, thus my reason for harrowing so thoroughly.

It is best to plant such crops as maize, Kafir-corn and sorghum in April or May. We have rains throughout June, and if crops are started between the first of April and the middle of May they procure the benefit of the June rains and become large enough to withstand the inevitable August drought. One must preserve every possible atom of moisture deposited by the winter snows for sprouting the seed.

The haphazard farmer in this semi-arid country who waits until June to break his land and to plant, will find his crop curtailed by drought and at a time when rain is most needed.

Deep plowing in winter, thorough harrowing while the land is moist, early planting and shallow cultivation during the droughty period are my secrets of success in raising forage crops in eastern New Mexico.

New Mexico. E. BEADLES.

## How to Bring Up Worn-Out Land

I will give my method of restoring worn-out land. First, take a two-horse turning-plow and turn the land, plowing just as deep as you possibly can; and let a one-horse straight-plow follow in the same furrow. When you get your "old field" plowed this way, you will have your land subsoiled.

This should be done in the latter part of July, and then the land should be double cut with a disk harrow and about 250 pounds of good fertilizer broadcast over the land. Then broadcast two bushels of cow-peas and harrow the second time. About the middle of September the land should be plowed again, turning under the pea-vines, and once more harrowed. Then drill in five pecks of wheat to the acre, and 250 pounds of fertilizer.

You can expect a fairly good crop the first year. The second year you should repeat the process, and then you will have your ground brought up till it should produce twenty-five bushels of wheat per acre. After the second year you may harvest the pea-vines, than which there is no better feed for milk cows.

North Carolina. H. C. WALKER.



### Renewing Old Pastures

IN A RECENT number of the "National Stockman and Farmer," Mr. Alva Agee tells of a successful experiment in renewing an old pasture as follows:

The Ohio station is undertaking to renew a worn-out hill-pasture on its southeastern test farm without breaking the ground. This experiment has direct interest for many farmers in the rough sections of the country. It was begun one year ago, and recently I went over the field with Director Thorne. The greater part of it was disked sufficiently to give some fresh soil, but not enough to destroy the little grass that remained from a sod once fairly good I presume. It was then reseeded with clover and grasses, and was fertilized. The new growth is excellent.

But the actual test of the need of the land was made on a series of plats in the field, where manure, various commercial fertilizers, reseeding and no treatment were tried. The soil is clay, and is typical of much hill land in the Ohio valley. A study of all the plats is convincing that such worn pasture lands need only two things, namely, phosphorus and reseeding.

The live-stock farmer rarely believes that his land needs any form of commercial fertilizer, and yet while phosphorus is the element usually deficient in soils, the grazer is putting none back but is removing it in the form of animal bone all the time. As Dr. Hopkins says, all the bone fertilizer on the market is needed by the stockmen to restore the phosphorus removed in those bones. On this test farm in the hills of southern Ohio the pasture experiment indicates the lack of this one element. Stable manure gave results, and so did a complete fertilizer, but steamed bone alone did about equally well. Lime was not needed apparently on this field. Treatment without reseeding was valueless. Worn pasture land should have liberal reseeding, and clover should be used to get nitrogen for the timothy and other grasses. Phosphorus, in steamed bone or acid phosphate, and reseeding are the chief needs of many an old hill-pasture that cannot well be broken.

### Taking Care of Soil Moisture

In the "Practical Farmer," Mr. Grant Davis gives the open secret of conserving soil moisture for the use of growing crops as follows:

Two years ago we had an early drought. Many farmers were obliged to postpone planting until too late for best results. The corn ground lay in ridges just as the plow had left it, with not a particle of moisture above the furrow bottoms. Following my usual practice, I harrowed as fast as I plowed, and at least every week thereafter. When I got ready to plant, there was moisture in plenty. It was not until about June 1st that rains came and made it possible for others to get their ground in order. It was late, but that was not all; the spring moisture had been leaving the rough furrowed fields, and it is pretty sure to be wanted before the summer is over. The opening of spring usually finds the soil saturated with moisture—several hundred tons to every acre. In winter and spring the rainfall is, as a rule, largely in excess of evaporation, while in summer it is the other way. The warm winds and the beat of the sun evaporate water from the surface of the earth rapidly. Besides evaporation, vast quantities are exhaled, in the growing season, by vegetation and trees. To replace this water lost at the surface, more is continually drawn up from below. The water level in the ground becomes lower, and capillary action, which brings the water to the surface, gets more and more feeble. A rain may come to replenish the supply, or a drought may come and the top layers of the soil be without moisture and the crops suffer. But something can be done to hold in reserve this spring supply of water. We can keep it for our crops, largely, if we will go to the trouble. In the San Joaquin Valley, California, where it does not rain in summer, they consider that they are all right for a grain crop, provided there is enough rain in winter to thoroughly wet the ground. Harrow down smooth as fast as plowed. Evaporation is more rapid in proportion as the surface is more uneven. If a rain comes and puddles the surface, be sure to harrow just as soon as dry enough. A crust should not be allowed to form. Stirring the soil breaks up the capillary circulation and keeps the water from the immediate surface, hence retarding evaporation. If a cultivated crop is planted on the ground, the stirring of the soil can go on for the greater part of the season. Do not wait for a rain, but keep the ground stirred. The story is told of a German farmer in South Jersey who wore out the patience of his hired help by keeping them behind the cultivators in a corn-field during a long drought. They didn't see any good in it. But he had a fair crop of corn, while his neighbors had none. By working a dust mulch on the surface the spring stores

of water were made to feed the crop, whereas, in other cases it had escaped by evaporation before the corn had needed it. To get the best results the ground should be left as nearly level as possible, consequently a weeder or a narrow-toothed cultivator is best. Some will say that if a rain comes in time, this extra tillage will be work thrown away. But it is not. The stirring of the soil, no matter how long before planting it may be, how fine the surface is, or how clean the crop is never wasted labor. Tillage has been called a substitute for manure. While this may not be, it is undoubtedly true that most soils contain enough plant food for hundreds of good crops, but it is not in available forms. Every time the soil is stirred, letting in the air and rearranging the particles, some chemical action is started and a little plant food is set free.

### To Stack or Thrash Out of the Shock

"Wallaces' Farmer" discusses the question of stacking grain or thrashing it out of the shock, and gives the weight of its sound opinion in favor of the good, old-fashioned way:

One of the questions the farmer should be thinking about now is what care he will take of the crop which the good Lord gives him. Will he make the most of it, or will he waste a large part of it? The answer to this question will depend largely on whether he determines to stack his grain or thrash out of the shock.

If he knows how to stack, or has a man

one month to twelve, for so efficient is the distribution of temperature and rainfall over the grain fields of the world that we are never a year ahead and are never starved. Somebody must carry this grain. It cannot be carried unless it is in condition to be carried. That is, it cannot be carried if it is damp or moldy. In the humid sections it must go through the sweat.

Who is better prepared to carry it than the farmer? Therefore he can well afford to wait a month before thrashing, when his grain will be in such condition that he can hold it any number of months he sees fit in properly constructed bins kept free from vermin. This question of stacking or thrashing from the shock is not a question of labor at all, but is a question of securing the crop in the best possible condition.

There are difficulties in the way, of course. One is that comparatively few men know how to build a stack. They can learn, however. Another is that so common has been the practice of thrashing from the shock that the farmer fears a machine will not come into his neighborhood if his custom is different from that of his neighbors. The way to avoid this is to get the neighbors together, read them this article, talk it over, and if they are afraid the thrashing-machine will skip them, pool their issues and get a machine of their own. They do not need a large one; they do not need a traction engine even. They can manage it with a horse-power. But at any rate, in some way, get the grain stacked in good order, thrash it in good order, and market it when you have a mind to.

In this, as in a great many other things, one should not forget the words of the

rich in inoculating material, and of course is a good fertilizer. The best results known to the writer in inoculating alfalfa have come from the use of such manure. In parts of Kansas and Nebraska the subsoil is hard-pan, so hard that it is difficult to dig through it. When alfalfa was first grown on these lands it yielded fair crops for two or three years, and then began to die out rapidly, and the plants that were alive made a weak growth. It was found that the land should be broken up as soon as the alfalfa began to fail. One crop of corn was raised on the sod while the deep roots were rotting, and then the land was again seeded to alfalfa. The second seeding made a permanent good stand, and there are now many fields of this second seeding that have yielded good crops for fifteen years, and are as vigorous as at any time since being started. There seems to be two causes for these conditions. It was noticed that there were a few tubercles on the roots from the first seeding, and larger numbers on the roots from the second seeding. Cultivating the corn distributed the tubercles from the first seeding all through the soil, so that every root of the second seeding was inoculated as soon as it started. The roots from the first seeding had hard work to bore through the hard-pan subsoil and after two or three years of it were so weakened that the plants died. The roots from the second seeding were well fed by their numerous tubercles, and the old roots had opened the subsoil to a depth of five to eight feet, and by the time they reached untouched subsoil they were strong enough to go into it. It has been found everywhere that it is much easier to grow alfalfa the second time on a field, the first seeding inoculating the soil and preparing the subsoil. Eastern farmers who are having a hard struggle with their first trial will find that if they get fair results for two or three years most of their troubles will have disappeared when they seed the land the second time.

### Applying Manure to Land

Answering a query about the best time to apply manure to land, "Hoard's Dairyman" says:

Whenever it is possible manure should be taken directly to the field from the stable and spread at once, not left in heaps to await a more convenient time. Manure cannot be kept by any method of storing so there will not be loss in a greater or less degree.

Fermentation always means a breaking down and loss of nitrogen compounds that pass away as gas, and consequently as soon as manure is got onto and under the soil the less will be the loss. Nitrogen is worth fifteen cents per pound, if bought in a fertilizer, and it consequently takes but a short time for a fermenting heap of manure to lose many dollars' worth of nitrogen.

### Russia

[CONTINUED FROM PAGE 1]

and he would about as soon think of imitating the abode of one as the other.

When the Russian peasant observes a parish fête in regular orthodox style, a wild and exciting time ensues. The day previous is devoted to a general overhauling and cleansing of the house, and to laying in a large supply of food and drink. One of the preliminary acts is to place a lighted lamp in front of the ikon which is always located in one corner of the room. The fête is ushered in by an extensive service at the church, which is attended by everybody except those of the women folks who must remain at home to prepare the dinner. The big meal occurs about noon, and consists of whatever animal meat the family can afford—seldom as expensive as mutton or pork—and a variety of other dishes. Cabbage-soup is a universal item on the Russian peasant's bill of fare. Beer and vodka are served to all, and no matter how short the supply of food may be, there is never a scarcity of liquor.

At the conclusion of the repast the whole company rises, turns toward the ikon in the corner, and goes through the formality of bowing repeatedly and making the sign of the cross. After the food has been consumed, and the religious obligation discharged, unlimited rounds of drinks are served, and the greatest hilarity prevails. Some drink so much that they have to go to sleep at once, while others stroll about and chat with their friends, but the upshot of almost every conversation is to take another drink. There are songs and games interspersed with drinking until the guests depart. On such occasions many of the peasants cannot find their way home and sink down by the wayside in a drunken stupor. A host considers it a great joke when he fills his guests so full that their legs won't carry them, and they have to pass the night outdoors. The universal habit of drunkenness is one of the most disgusting and deplorable phases of country life in Russia.



FARM HOME SCENE IN RUSSIA

who does, or if he is willing to learn how, there is no reason why the farmer outside of the one-crop wheat-growing country cannot save all his crop in first-class condition, instead of saving nine tenths of it in second or third class condition. We are quite well aware that stacking is not practicable in the extreme western portion of our territory, and we do not recommend it for that portion; but we recommend it all the more earnestly for the humid section, wherever there is a rainfall of twenty-five inches or over.

These people who are growing wheat with a rainfall of twenty inches or less, and growing it on a large scale, must thrash out of the shock, or perhaps cut it with the header, and hence should have the right of way to markets. For this practice of thrashing out of the shock is not merely wasteful of the grain, saving very little in fact of labor, and giving the good wife annoyance without end, but it forces grain on the market in a condition in which it must be sold regardless of price. Hence it not only decreases the yield, but decreases the quality and greatly decreases the price.

The older the country becomes, the more carefully farmers must study the harvesting of grain; for the farmer's business is not merely to grow grain, but to get value out of it. He is not working for bushels but for dollars, and hence it is of the utmost importance that every man be prepared to hold his grain for the better price. We do not say that he should hold it where circumstances require selling direct from the machine; but we do say that he should be prepared to hold it.

The great bulk of the harvest of grain of this country must be held by somebody from

great Master: "Gather up the fragments, that nothing be lost." It is estimated that the loss in the humid sections in thrashing grain from the shock is about ten per cent. The loss from deterioration frequently adds another ten per cent, sometimes more. Now, why should we grow a whole crop, use only four fifths of it, and then get less money for that by rushing it on the market than the movements of the world's markets would enable us to demand?

### Inoculation of Alfalfa

In a recent number of the "Rural New-Yorker," Mr. H. M. Cottrell contributes an interesting article on the subject of inoculating alfalfa with nitrogen-gathering bacteria. He says:

I have not tried the commercial products that are advertised for inoculating alfalfa. I am familiar with the effect with soil taken from an alfalfa field where tubercles are abundant on the roots, and with inoculation with manure made from animals fed Western-grown alfalfa. Where soil is used it should be taken from the first three inches in depth, and from a field where the tubercles are plentiful on the alfalfa roots, and the plants are vigorous. Sow four hundred to five hundred pounds of soil per acre, sowing broadcast just after sowing the seed. The harrowing that covers the seed will mix the inoculating soil with the seed and the soil of the field. Eastern farmers have a cheap way of inoculating their fields for alfalfa. They can feed horses, cattle or hogs and probably poultry with alfalfa-meal, made from Western-grown hay. The meal is a profitable feed, the manure from it is



## Fire Blight of Apples and Pears

FROM reports sent from various parts of the country, it appears that the malignant blight (or fire blight) of the pear is quite prevalent. It affects apple trees as well as pear trees, and is difficult to keep in check. Its favorite point of entrance into a tree is at the tender tips of the young wood, especially at the blossom. The blighted wood should be quickly and carefully removed, always cutting a foot or more below the lowest point of visible attack. The infection has usually reached much farther down in the limb or twig than is shown in the dying of the parts. Great care is also necessary in keeping the knife or saw thoroughly disinfected while using these tools in a diseased tree. In fact the tool should be wiped off with a sponge or cloth moistened in a strong carbolic acid solution each time a limb has been cut off. Badly diseased trees might better be destroyed entirely. For this disease no half measures will do. The treatment must be heroic.

## Rotted Sawdust for Manure

A reader in Willshire, Ohio, asks whether it would pay him to haul rotten sawdust two miles, especially when he has to pay something for that material. He wants it for the purpose of improving a piece of rather poor clay soil. Rotten sawdust contains a very inconsiderable amount of plant foods, and I do not think I would pay anything for it or even haul it two miles unless there were special conditions which made it desirable. What you or anybody else wants to improve poor clay land is to apply stable manure, and then to try to get it in clover or other leguminous soiling crops.

After you have once succeeded in getting a good clover sod, it is rather easy to make the land better from year to year and to produce satisfactory and increasing crops by applying chemical mineral manures (or now and then a little ordinary farm manure), and following a strict system of rotation, with clover as one of the links of a short chain.

## About Lima Beans

I usually plant the flat lima bean, such as King of the Garden or Early Jersey, although I concede that the round Dreer's or Potato lima is fine, and a favorite in some markets. Any lima is good, however. I plant the pole forms of limas because I can raise bigger crops than by growing the dwarf or bush forms. I have for years had them in a long row, trained to a wire and twine trellis. The end posts must be set very firmly and well braced, and the wire should be strong, preferably galvanized to prevent rusting. The upper wire may be four or five feet above the ground, and held up by a few crooked sticks or poles set between the posts. It has to carry a great weight when loaded with thrifty vines. This year I have planted two rows about five feet apart, and am connecting the posts and middle supports by cross-pieces, so as to make the whole structure considerably stronger than a single row can be made. And in order to give some extra push to the plants, I have scattered a good lot of hen manure fresh from the hen-house around the plants, and already dug this into the soil with cultivator and hoe. Limas need liberal feeding.

## Planting Limas

A Buffalo seedsman asked me the other day whether our summers were long enough to ripen the large lima beans. I had to tell him that in most seasons the entire crop ripens even before the first light touch of frost, and if we want to have a full supply clear to the very end of the lima-bean season, which sometimes can be extended until November, we have to make a late planting along in June. On sandy loam in New Jersey I have grown very fine crops of limas with commercial (complete) fertilizers only. Here I use good stable manure, and plenty of it. A New Jersey grower says in "American Agriculturist": "A quart of Dreer's lima will plant two hundred hills, and can be dropped like corn, as the seed beans are small and round, and turn readily in the soil. A quart of flat limas will plant one hundred hills, and should always be placed in the soil by hand with the eye down, and covered lightly with loose soil." I usually save my own lima-bean seed, and take pains to secure a good lot, always selecting the large and well-filled pods near the foot of the plants. I can therefore afford to use plenty of seed, preferring to have to pull up superfluous plants rather than have miss hills. So I plant even my flat limas by dropping as I would corn, and I do not experience any trouble about the beans not coming up. Planting singly by hand, with the eye down, is too slow business for me. It may do where you plant a dozen hills.

# Gardening

## Our Seed Potatoes and the Yield

In his potato tests and experiments the late lamented Prof. E. S. Goff selected the potatoes taken from the most productive hills and those from the least productive hills for planting the following season, with a view of comparing the yields. He found a very considerable difference in favor of the seed from the most productive hills, as might have been expected. Every observing potato-grower knows that there is a great difference in yield of the individual hills, even where all the conditions and environment seem to be exactly the same. Often we dig up a hill or plant containing a fair number of uniformly large and fine tubers, when right next to it may be a plant having dozens of undersized, worthless potatoes aggregating less than one half in bulk or weight of the first-mentioned hill. Why this difference on the same soil and with exactly the same treatment?

I believe that it is largely, if not wholly, to be accounted for by the condition of the tubers used for seed. Neither does it seem to me very difficult to pick out the potato that is liable to produce the good hill, or the one liable to give the smaller and more unsatisfactory yield. I have just picked out and made a drawing of one specimen which represents the type of what I call good seed, and also one specimen which represents the type of what is unquestionably poor seed. One has been exposed more or less to the light, and has the short, stubby sprouts in moderate numbers, with a number of still dormant eyes, and is plump and solid. The other has six to eight spindling sprouts four to eight inches long, and is wilted and soft. The result may be easily foretold. At least I would expect double the weight of good marketable product from the sound, plump tuber than I do of the wilted, long-sprouted one. I have, however, no record of any exact tests having been made to prove the difference in the outcome from this cause.

I have now divided the two bushels of Early Ohio I have yet to plant (rather

often at considerable less than twenty-five cents apiece, and the person who plants them anywhere on the premises makes no mistake.

The question is how to prune them. W. V. E., of the "Rural New Yorker" says: "The best treatment is to let them pretty much alone. Let them grow at will, only directing and training the canes enough to secure reasonably secure attachment to the trellis or the support. They scarcely need pruning for several years after planting, except to cut out any weak or useless canes, and nip off winter-killed wood after growth has started in spring. It is a great mistake to cut out the old canes yearly in the manner of blackberries and raspberries. Rose canes normally live several years, and the Ramblers often produce the finest clusters of bloom on growth two or three years old. After the third year the vitality of the canes diminishes. They should then neatly be cut away at the base or just above a plump bud or promising new sprout. Interfering branches and twiggy outgrowths as well as weak wood generally should be cleared away and the ends of the young canes slightly shortened."

That such wonderfully rampant growth as these roses make under favorable circumstances, free application of plant foods, best in the form of old compost given by the wheelbarrow-load fall and spring, and preferably with additions of wood-ashes, bone dust or other chemical manures, seems to be almost self-evident. The Crimson Rambler is the rose for everybody. Plant it and then feed it!

## Women and Mushrooms

In an article appearing in the New York "Mail," and largely copied in the agricultural press, it is stated as fact that "the culture of mushrooms is a most interesting and profitable way of earning money at home for women who have energy and a certain amount of time to devote to it. The mushrooms can be grown at all seasons and in almost all places. In raising

Just at present I have a "pure-culture-spawn" bed in the greenhouse, which was made late last fall, and should have given us mushrooms all winter. The pure-culture spawn is now giving us a moderate number of fine mushrooms, while a part of the bed planted with the ordinary imported brick spawn has not yet shown the first signs of life. I believe that of all vegetable crops there is not one more uncertain as to results, and especially as to profits, so far as the ordinary person, male or female, is concerned, than mushrooms. Sometimes the novice has good luck in the very first trial, only to meet with failure after failure later. My good woman who has read the "Mail" reporter's article, don't count too much on the money you will get for your first mushroom crop. Wait till the chickens (or mushrooms) hatch before counting them!

## Green Onions an Early Spring Tonic

Early this spring, after we had lived largely on meats for some time, every member of the family seemed to be complaining of poor appetite. We would hardly touch potatoes and meat, and very little of any-kind of food was eaten at our table. Then came a few messes of dandelion greens and of spinach, and finally those tender little green onions of the Silverskin or White Portugal variety that had been sown in open ground in August of last year and been wintered over in open ground. These onions are so fine and tender and sweet that every member of the family, even the fifteen-months-old baby girl, will eat freely of them, and this day after day. Then there came a marked change in our physical condition. Our appetites returned. We began to eat quantities of potatoes and asparagus, and homemade "sugar-cured" (not liquid-smoke-painted Western) hams, and green onions and radishes by the wholesale, and the more we eat of these things the better we seem to feel. In fact, the green stuff, and especially the young onions, act like a spring tonic for all of us. Fresh lettuce is also consumed at our house in vast quantities. With the strawberries, the sour cherries, the currants, etc., and later on the tomatoes; yet to come, we shall be in shape to keep up our appetites, and ourselves therefore in fairly good physical condition generally. The onions, however, seem to be an indispensable link in the chain of natural spring tonics.

## Using Soda Bordeaux

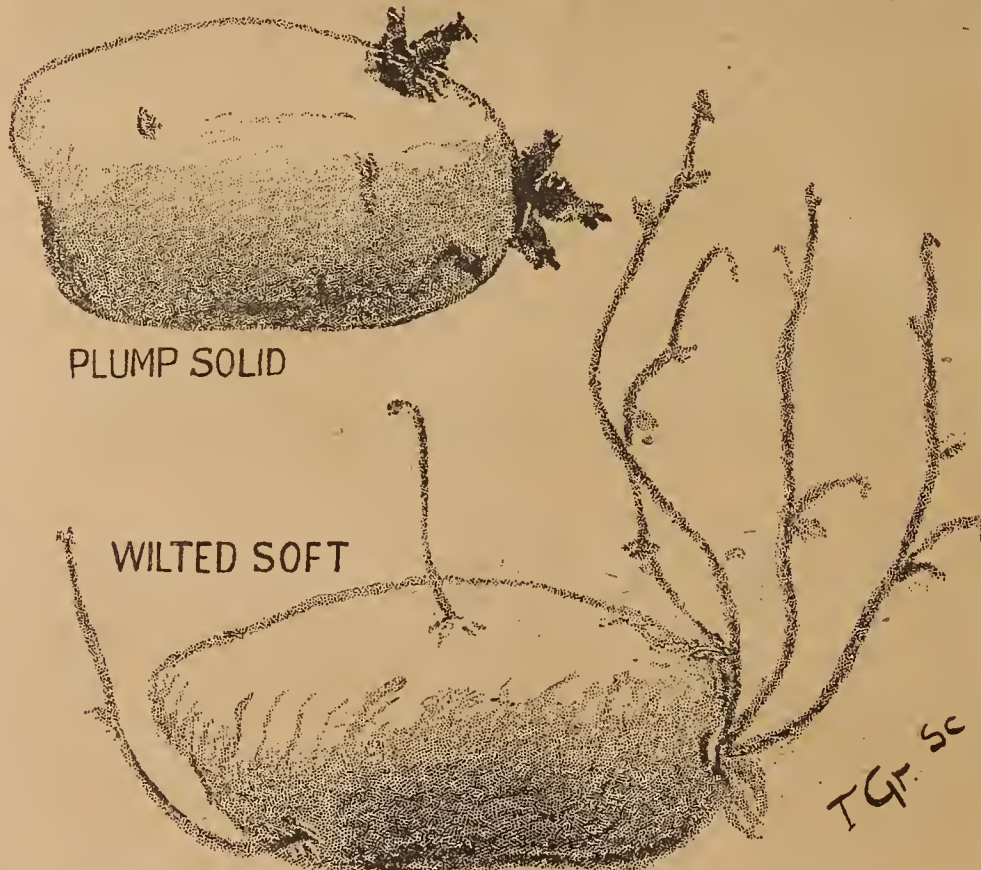
A Massachusetts reader reports that he has used the soda-Bordeaux mixture, made according to recipe given in these columns, last year, and had better potatoes than many of his neighbors. Now he asks for instructions how to make the mixture on a large scale. He proposes to set two barrels on a platform, one to contain the copper-sulphate solution, the other to contain the soda solution, and then to let the liquids from both barrels run together at the same time into a third barrel set below them. The idea is all right.

Dissolve six pounds of copper sulphate in twenty-five or thirty gallons of water in one barrel, and seven and one half pounds of sal soda in about the same number of gallons of water in the other barrel. A pound or so of freshly slaked stone lime may be added to the sal-soda solution if preferred. Then allow the two liquids to run together in small streams of about the same volume into the lower barrel, keeping the mixture well stirred all the time. This should make a superior spray mixture. Arsenate of lead or other arsenical poison may be added to this. I have never noticed the least injury done to potato or cucumber and squash foliage by this mixture, no matter how freely and how frequently applied. It is worth trying.

*T. G. S.*

## Low-Cost Potatoes

An estimate of the cost of growing potatoes in Michigan recently made places the figure at fourteen cents, which sounds very low, but at the same time we observe an estimate by a grower in Waldo County, Maine, who reaches exactly the same conclusion, having grown 216 bushels for \$30.24, which would be fourteen cents per bushel. Some of his items, however, sound rather underestimated. He figures for plowing and harrowing \$3, planting \$3.50, seed \$3, fertilizer, 800 pounds, \$11.75, harrowing \$2, paris green applied \$1, digging and storing \$6.—The American Cultivator.



late, as it is) in two lots, one as near as I can make it of tubers of the one type of seed and the other lot of the other type. They will be planted in alternate rows, and all receive the same treatment. A comparison of the yield I expect will show me that we can double our ordinary potato yield simply by careful selection, and especially rejection, of potatoes for seed.

## Rambler Roses

The Crimson Rambler, specimens of which I planted after having seen the wonderful display of these roses in masses on the Pan-American exposition grounds, will soon show off in all their gorgeous splendor. This rose enjoys a well-deserved popularity, and we now see these plants very frequently, trained up to the south side of the houses, running over the porches, or planted along the walks and trained to trellises. The plants are offered very cheap in seed and department stores

mushrooms, the point to be considered is not, "Can they be grown?" but "Can they be disposed of?" For the woman, therefore, who lives sufficiently near a large city for their transportation to be a simple matter, the mushrooms may be made to bring in a most satisfactory sum of additional money."

It is all right for a city reporter who knows no more about mushroom growing than about most other things he writes about, to make such statements of easy profits in mushroom growing. I have tried this mushroom business a good many times, in cellars, in the greenhouse, in hotbeds and cold frames, in the open air, etc., during fall, winter, spring and summer, trying my hand on the ordinary *Agaricus campestris*, and on the newer *subrufescens*, which can stand a higher temperature than the other, and I have at times grown a satisfactory yield of 'rooms, and then again looked in vain for a crop.



## List of Varieties of Apples and Pears for Northern Ohio

SOIL and location have much to do in determining the value of different varieties of fruits for different locations, and there are very likely some special varieties that would do better in your section than these here mentioned, but these are good standard sorts:

Apples: Baldwin, Golden Russet, Jonathan, Maiden Blush, Oldenberg, Rhode Island Greening, Talman Sweet. Pears: Angouleme, Bartlett, Keiffer, Lawrence and Seckel.

### Peach-Borer

A. B., Clovis, Cal.—The peach-borer that gets into peach trees is probably best prevented from doing serious injury by going over the trees in the spring and again in August and digging out the borers with a small pocket-knife. In the case of trees that were damaged by borers last year, but are now free from them, I would suggest that the wounds be closed up with grafting-wax, and where these are near the surface of the ground they should also be protected by the soil. This prevents them from drying out, so they have a chance to heal over.

### Insects in Carolina Poplar

M. H., South Webster, Ohio—The Carolina poplar is as a rule very free from the attacks of injurious insects, but occasionally it may be infested by borers. In your case I think that the borers had injured the branches. If you would forward one of the insects that you think did the injury I might be able to give you more definite information. It is probable that this injury will not extend much further, although it may do so.

### Paris Green for Currant-Worms

C. R. M., Springfield, Mo.—You have done quite right in using paris green for destroying the worms on your gooseberries. I use it every year, and also use the berries, and know that there is no danger. However, I should not want to put the paris green on just a few days before the berries were to be used. The amount of paris green used on gooseberry bushes is so small that I doubt if it would cause any unpleasant symptoms, even if it was put on only a few days before the fruit was used. If applied as recommended there is no danger whatever.

### Catalpa for the North

E. C., Camp Douglas, Wis.—The best form of Catalpa for growing in Wisconsin or in any of the Northern States is what is known as Catalpa speciosa. It is not yet too late to sow the seed, and it should do very well on a good sandy loam underlaid with a good clay subsoil, such as you describe. With Catalpa I think it generally best to sow the seed in a seed-bed, and when one year old transplant the seedlings to the place where the trees are to grow. The Catalpa is hardly hardy enough for a timber tree in Wisconsin, except in favorable locations.

There is much difficulty in getting the true seed of Catalpa speciosa, and I would suggest that you send to Mr. John Brown, Connersville, Indiana, for it, as he makes a specialty of this tree.

### Planting Brush Land with Willows

W. H. R., Milaca, Minn.—In planting out brush land with willow, I think the cuttings should be placed about two feet apart, in rows eight feet apart. If, however, there is much brush on the land, they could be planted four feet apart in the rows.

It does not make any difference as to the direction of the rows. They may run in any direction without affecting the growth of the trees.

### When to Cut Bushes to Prevent Sprouting

S. B., Mandan, N. D.—Any plant that is trimmed during the dormant season will have a tendency to sprout in the spring. The best time for cutting off brush so as to kill it and prevent its sprouting again is along in June, after the rapid growth of the season is largely past. Brush cut at this time seldom suckers, or if at all, only in a very weak way. In the case of gooseberries there is no way of trimming off the suckers that come up so they will fail to sprout. It is customary to keep the soil so well cultivated around them that there is little trouble from this source, and if the bushes are well trimmed once a year the suckers that come on should cause you no serious inconvenience.

### Aphis on Cherry Trees

S. S. B., Van Duesen, Mass.—The leaves of the Black Tartarian cherry which you send on, and which were curled up, are

injured by what is known as aphis, or plant lice. This is a very common insect, but some years is much more troublesome than others. It is almost impossible to reach these insects after the leaves have curled up, and the proper way of protecting the trees from them would be by spraying with strong tobacco water in the spring, just about the time the leaves unfold, at which time the lice are working on the foliage. In the case of small trees, the best method of treating them is to make a strong decoction of tobacco water and dip the branches into it. The simplest way of making this is by scalding tobacco stems and using the liquid about the color of strong tea. Vigorous trees generally outgrow any injury of this kind at the beginning of the season.

### Injury to Arbor-Vitae

J. J. K., Grateul, Wis.—In Wisconsin and Minnesota there has been considerable injury to Arbor-vitae and Red Cedar during the past winter. Trees that have not been injured previously for fifteen years have been killed out or have been badly browned, so that they look almost dead.

As a rule the Red Cedar of your section is considered much hardier than white

pounds of lime, five pounds of sulphate of copper and twenty-five gallons of water; or a solution made up of one pound of sulphate of copper to twenty-five gallons of water. Whichever formula you decide to use it should be sprayed on the trees about two weeks before the buds open in the spring. This treatment has been found very satisfactory.

### Early Grapes

J. P. C., Wentworth, N. H.—The Concord grape is too late in ripening for extremely northern points, unless near to lakes or otherwise protected from early autumn frosts. I think you would get much better results from the Worden or Moore's Early than from the Concord, as they generally ripen in fairly good grape localities in Wisconsin and Minnesota. One of the earliest, as well as hardiest grapes, is the Janesville. In quality, however, it is quite inferior, but is productive and generally recommended for unfavorable grape locations in the North. You had better try this also.

### Bugs on Roses

I think the bug that eats your roses before the flowers open is a little brown snout-beetle, and not what is known in the

### Black Raspberries

The black raspberry, or blackcap, because it lends itself to several methods of harvesting and marketing, is capable of a wider range of commercial cultivation than any of the types of the red raspberry. The black raspberry, under favorable conditions, is a strong, vigorous-growing plant, making canes armed with stiff pricklers and bearing its fruits upon shoots of one year's growth—that is, the shoots which grow one year bear fruit the succeeding spring.

The fruit of the black raspberry is borne in dense terminal clusters, and in most varieties is retained upon the plant even after it becomes fully ripe. This characteristic is taken advantage of nowadays to gather the fruits in a very inexpensive fashion. Besides having this character of holding the fruit, the black raspberry is as well adapted for marketing from the vines as is the red raspberry—in fact, it is not subject to the same criticism as is the red raspberry. The fruits of the black raspberry are more rigid in character and retain their form better. For this reason it is not necessary to use small-sized receptacles for placing them on the market, quart boxes being usually employed; but, as with the red raspberries the receptacles should be made of wood.

The black raspberry has another advantage over the red raspberry for commercial culture in that it is not so weedy in its habits of growth. It does not throw up root sprouts, as does the red raspberry, and for that reason it is more easily kept within bounds. It can also be more easily handled in check rows when desired, but in commercial plantations this is seldom done. Usually the plants are set comparatively close together in rows which are rather wide apart, and cultivation is carried on in one direction only.

As already stated, the black raspberry does not throw up root sprouts, and is propagated only from stolons or layers.

In order to secure new plants the tips of the branches are slightly covered with earth during the month of August, after which they take root readily. The rooted tips are usually left attached to the parent stalk until the following spring, when the branch is cut six or eight inches above the surface of the ground, the roots being lifted, tied in bunches, and stored for use or carried to the place where they are to be replanted. The character of soil on which the black raspberry thrives best is a rather rich clay loam. Sandy soils and those which are gravelly, unless well enriched, do not give sufficiently vigorous growth to make commercial planting profitable. Raspberries grow best on a soil which is naturally well drained, rather than one which is moist. Under natural conditions they are found usually where the soil is somewhat stony in character and provided with good natural drainage.

The same general preparation of the soil as outlined for the red raspberry is necessary for best results with the black raspberry. Preparatory treatment with cultivated crops in order to rid the land as thoroughly as possible of weeds is desirable. While the raspberry occupies the land for a considerable period of time, it has been demonstrated that instead of becoming unfitted for the production of cereal crops after the raspberries have been removed, the soil is capable of returning a good crop of wheat or rye. This is undoubtedly due to the method of cultivation practiced rather than to the fact that the raspberry adds any fertility to the soil. The distance at which black raspberries are usually set in commercial plantations is three feet apart in rows which are eight feet apart. The strong-growing, robust varieties will then make a very formidable hedge of considerable width. The same method of planting as described for red raspberries—that is, opening a furrow with the plow, placing the roots at the proper distances in the row, and covering with a turning plow—is very convenient and satisfactory. Clean cultivation is equally as desirable for the black raspberry as for the red raspberry, because weeds between the rows interfere with the later operations in the berry field. While cultivation should not be carried on so late in the season as to interfere with the harvesting of the fruit, it should be sufficiently thorough and continued late enough to keep the ground free from weeds.—Farmers' Bulletin No. 213.

### Starting Young Trees

Newly set trees, save the cherry, should be severely cut back. A good start is half the race, and nowhere does it have more significance than in the new orchard. With proper pruning, cultivation and fertilizing you may reasonably hope for a strong, vigorous and healthy tree which will be able to give returns in way of large yields of luscious fruit.—Lowell Roudebush in the National Stockman and Farmer.

## Fruit Growing



PICKING APPLES

pine, but last winter the White Pine was not injured except in very exposed places. I think this was caused by the drying winds which we had in the latter part of March, as the trees looked good up to about that time. Where they were protected from wind there is little or no injury. If your whole tree is in the condition of the twigs which you sent on, I am inclined to think that it will recover and outgrow the injury. I do not think any of the loss was occasioned by disease.

### Leaf-Curl

F. C., Beauford, Minn.—The plum branch with swollen leaves that you send on is plainly affected with what is known as leaf-curl. This disease seldom attacks the leaves of the plum, but is very common on the leaves of the peach, where it does much injury. On the plum this disease commonly causes plum pockets. The only successful method of preventing this disease is to spray the whole top of the tree with strong Bordeaux mixture made from the following formula: Five

Eastern States as the rose-bug. The best way of controlling it is by hand picking, beginning as soon as the buds form. The beetles are dumpish, and drop to the ground as soon as disturbed.

*Samuel B. Green*

### A Point in Pruning

A wound made by removing a limb heals best if the cut is made close to the trunk or branch. A stub two or three inches long does not heal, and becomes a lodging-place for spores of fungi and bacteria which cause decay and death of the tree. The splitting down of large limbs may often be avoided when pruning by sawing in from the under side first; but in every case, see that the wound is left clean and smooth. Wounds should also be covered immediately with a coat of paint, shellac or grafting wax to keep out the moisture and the spores before mentioned.—Prof. W. M. Munson in Maine Experiment Station Bulletin.





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## Poultry Raising

### Bowel Diseases in Summer

**D**URING the summer poultrymen become discouraged by the prevalence of diarrhea in the flock. As there are so many forms of bowel disease it is very difficult to distinguish one from another, especially on the part of those who have not considered it necessary to seek causes and effects; hence remedies are sought by the inexperienced, who are just as likely to request a panacea for cholera as for diarrhea, the true diarrhea being, it is claimed, caused by microscopic organisms which are developed in the intestines. Investigators affirm that the organisms pass through several stages, multiplying even in the blood, and are then ejected from the bowels, other fowls being effected by picking food or other articles from the contaminated ground. Where a disease must "run its course" there is no remedy that can be relied upon, owing to the difficulty of giving medicine to a large number of fowls, especially if the administrations thereof must be frequent. The disease may require about ten days before recovery occurs, while with cholera the result is usually death within forty-eight hours or rapid recovery. In this progressive age it may be also claimed that all diseases are due to rapid multiplication of germs, and science is making known much in relation thereto which was formerly not thoroughly understood.

The form of bowel disease that causes the greatest annoyance to farmers and poultrymen is that which is common with a large number of flocks, the evacuations being large and frequent, the fowls otherwise appearing healthy, having red combs, and not refusing food until the disease reaches a stage at which it begins to weaken them. Investigation shows that this form of diarrhea occurs mostly in flocks that are fed largely with grain, and which are fed three times a day. It is due to indigestion and lack of variety of food, but does not seem to appear until the birds have accumulated an excess of fat; that is, if the fowls are examined after death, they will be found to have accumulated fat to such an extent as to affect the heart (hoarse breathing), the liver will be soft and crumbly, and the reproductive organs clogged with fat to such degree as to interfere with laying, and if a hen so afflicted produces eggs they may be of abnormal shapes, some being very large, others containing two yolks, a proportion having soft shells, while occasionally there will appear a large egg containing a smaller one. The fat may so oppress the fowl as to cause undue pressure against the heart, which may be noticed by causing the bird to move quickly, or when it is on the roost after eating a full allowance of food, the bird then showing its distress by shortness of breath, and it is liable to sudden death, which accounts for some hens being found dead under the roost, they otherwise seeming to be healthy, with red combs and bright plumage. It may be added that it is annoying to discover the prettiest and best hen in the flock dead under the roost, and to test the matter all hens found dead should be dissected. The main cause of this excess of fat is feeding the flock three times a day. The noon meal should be omitted.

Lice will also cause bowel disease, although it may appear that no lice are in the quarters, but the large lice that prey upon the bodies, especially on the heads and under the wings, can nearly always be found. The small red mites are busy mostly at night. The fowl becomes exhausted from loss of rest, is soon emaciated, and refuses food.

Bowel diseases may result when the food is lacking in some essential substance, such as protein or mineral matter. Sameness of diet is a potent factor in promoting bowel difficulties of every form, whether of too little green food or too much, under certain circumstances. One of the best substances to keep in the poultry-yard is ground bone, as it is phosphate of lime, and supplies mineral matter in the most acceptable form. Animal-meal (ground meat) also contains bone, and supplies both protein and mineral matter. If a flock of fowls is given animal-meal once a day, or at least three times a day, with some kind of green food, even if in limited proportions, there will be fewer cases of bowel disease. Feeding grain food almost exclusively will bring on the difficulty if such course of feeding is persisted upon.

As to remedies, the first duty is to remove the cause, which is to greatly reduce the proportion of grain. Have a place for the sick fowls, and have clean yards. Give no food for forty-eight hours (not

thirty-six hours, or a reduction of the fast), allowing no food, but a plentiful supply of fresh water should be convenient for their use, adding one teaspoonful of tincture of nux vomica to every quart of water, omitting the nux vomica at the expiration of the forty-eight hours. For the next two days allow one ounce of lean meat from the butcher to each fowl, no other food being given except a tablespoonful of millet seed, scattered in litter, to induce the hens to scratch and thus work. On the fifth day the meat may be given in the morning and a gill of wheat at night, the fowls to be fed on a variety thereafter, morning and night, but if they have the run of the farm they will require little or no food from their owner.

There are bowel diseases which seem to be contagious with both fowls and chicks, and they may be due to roup, irregular methods of feeding, or to the existence of certain germs in the soil. If the disease is persistent, and appears to be contagious, the best remedy is to destroy the entire flock, thoroughly disinfect the premises, and procure stock from elsewhere.

The cheapest and best method of disinfecting is to dissolve one pound of copperas (sulphate of iron) and an ounce of bluestone (sulphate of copper), in two gallons of hot water, adding a gill of sulphuric acid. When cold add four gallons of water and apply to every portion of the house and grounds, and if several applications are made, so much the better.

### Milk for Poultry

To place a pan of milk in the sun, and allow little chicks to help themselves, is not the best method. For chicks the milk should be used for moistening the ground grain. Adult fowls may be allowed skim-milk, buttermilk, curds, or even whey, but the supply should be fresh every morning. One of the reasons why milk is said to cause bowel disease is that it is sometimes placed in open pans, to remain until all is used, during which period it becomes filthy, and is then an excellent carrier of disease. Milk should not be given to any flock that contains a single sick fowl, unless the sick bird is removed, as milk will more easily serve to distribute disease than water. If given under the supervision of a careful attendant, and changed daily, the flock being free from disease, milk is one of the best and cheapest of foods, but it is not a substitute for water, nor will it take the place of meat.

### A Difficulty with Chicks

A lady at Harrison, Ohio, writes for a remedy for an ailment of chicks, a satisfactory reply to which could not be given in the brief space allotted to "Inquiries." Her brood is afflicted with what is known among many as "bound," that is, costiveness of the bowels, the vent sometimes being clogged. Unfortunately, like many, she overlooked stating her method of management in regard to quantity and kinds of foods used, as the cause is probably due to the food, which is no doubt lacking in variety. The vent should be cleaned and a few drops of melted lard applied. The best remedy is to change the food, not necessarily the whole, but a portion thereof, giving a teaspoonful of linseed-meal once a day, to a dozen chicks, in a gill of corn-meal moistened with milk, adding such green food as chopped onion tops, white clover or anything that they will accept. Also, give the chicks bone-meal in a little box, so that they can reach it whenever they desire.

### Keeping Up the Egg Supply

If the hens are now laying they will give good results if they are allowed the liberty of the fields, in which case do not feed them at all, except about a pint of wheat at night to twenty hens, as an inducement to come home. If they are confined, aim to reduce the grain food gradually, in order not to make a change too suddenly, for it is one of the peculiarities of hens, as with cows, that if suddenly changed from one food to another, even if the change is to something better, they are liable to fall off in quantity of product. The grains are rich in starch, and at this season of the year, when the maintenance of the body can be reduced to a minimum cost, the best way to get eggs is to largely reduce the grain food, which tends to make the hens too fat in summer, and allow in place of grain foods containing a greater proportion of protein. Green

clover should be supplied to hens in confinement, and ground meat and bone should not be overlooked. One advantage in feeding green clover is that it contains both protein and mineral matter, being also easily digested. It may be finely chopped and given to the hens, or a sod may be placed in the yard. What the farmer or poultryman should do is to keep the hens laying. If fed liberally on grain they will lay a large number of eggs until they reach a certain stage, when the number of eggs may gradually be reduced. If very fat the hens will not give satisfactory results, and it is therefore less troublesome to turn the fowls out to forage, and give no food at all at this season, than to attempt to force them with grain, the result of which being usually fewer eggs than when the hens can help themselves to grass, seeds and insects.

### A Heavy Task

A subscriber to the FARM AND FIRESIDE, residing at Grafton, Neb., writes that her fowls are dying, their eyes being watery, the heads swollen, and canker shows in their throats. It is probably useless to attempt to cure the disease, which is really a form of roup, for the reason that it is almost impossible to do so except at an expense for time and labor too great for the results obtained, especially as the entire flock may be lost, even with the best of care that may be bestowed. To sponge the eyes of each fowl, as well as to carefully swab the throats, once or twice a day, is "sure cure." Destroy the birds and disinfect the premises.

*P. H. Jacobs.*

### The Fancier

He could tell the names and breeding  
Of all birds, obscure or leading,  
That had ever taken prizes,  
From a moa to a lark;  
He could also, gentle reader,  
Mention every noted breeder,  
Including Mrs. Noah,  
Who hatched chickens in the ark.

He was also a designer,  
And his poultry-house was finer  
Than were those of any breeder  
That ever saw the sun;  
While his yards were dry and sunny,  
He spared neither time nor money  
To improve the breeds that wandered  
On his broad ten-acre run.

There were Wyandottes and Spanish,  
And Chinese that none could banish,  
Leghorn, Langshan and Minorca,  
And that famed all-purpose fowl,  
Redcap, Dominique and Dorking,  
Indian Game, and Bantam staking,  
Hamburg, Houdan, Andalusian,  
And the Polish with its cowl.

He knew all about their breeding,  
And the proper way of feeding,  
And could tell the egg producer  
That would make the pullets lay;  
He knew what would make them fatter,  
And 'twas not the slightest matter  
What the question was you asked him,  
He could always tell the way.

He knew which were best for laying,  
In the cold, or time for haying,  
Knew the best non-sitting Brahma,  
And the early laying strain,  
And what color every feather  
Should be, he could tell, and whether  
Chickens would be better broilers  
Were they fed on mash or grain.

He knew every poultry failing,  
From the roup to the simplest ailing,  
And ten pages in a paper  
On the subject he could fill;  
None could sound the praises louder  
Of each poultry pill or powder,  
From Hoddinott's mixture  
To the Douglas cholera pill.

He a judge was often voted,  
But so thoroughly was noted,  
Autumn, winter, spring or summer,  
He was always at the show;  
Though his birds were never in it,  
You could mention in a minute  
All there was to poultry raising,  
That this fancier did not know.

As an author he was noted,  
And his wise remarks were quoted  
In the leading poultry papers,  
Every season by the score;  
His advice he sold for money,  
But although it seems so funny,  
When he wanted eggs he bought them  
At the corner grocery store.

—The American Fancier.



Dairy Points

There are differences in ideas as to valuable points in a dairy cow. Some men insist upon certain markings, spots, certain shades and colors, but all these in the active work of the cow's making milk are of very uncertain importance. Human beauty is said to be "only skin deep," and certainly cow markings may be no deeper than the hair. A black tongue and a black switch in a thoroughbred Jersey may be points we like to see, but I have Jersey white tongues that will lick up the meal as closely as any of the black tongues, and white switches that are as busy in fly-time—and sometimes at milking-time—as any of the black ones in the herd.

While there may be no virtue in shades or color-markings, there are distinctive types of dairy shapes or forms. No true dairyman fails to distinguish the dairy form from the beef form. The latter form indicates a five or six cent product, the former a thirty or forty cent product. For the finer work there is the finer physical equipment, a physiological consciousness of a destiny and an ability to do something beyond the ordinary.

Along with this pronounced dairy form the careful dairyman will want his cow to have the constitutional ability to stand the strain of her work. In a given amount of feed there is a well-defined limit to a possible animal product, that is, it is impossible that the cow shall return in her milk more than she was able to find in her feed. Some cows will return more than others, and herein lies the profitable superiority of one cow over another; but every cow has her limitations; this particular point of superiority, this largest net profit is the item in business dairying that makes colors, shades and spots questions of fancy only.

*N. F. McSparran*

A New Idea in Storing Milk and Butter

A recent invention, called a cooking chest, seems to offer a suggestion that may be of value on the farm. In a cooking chest the idea is to economize heat by preventing its escape. A kettle of meat or vegetables is taken, while boiling hot, from the fire and packed in the chest. As the heat cannot escape, the cooking goes on for hours in the chest and without any fire.

FARM AND FIRESIDE, thinking that this invention might be used in cooling milk and preserving butter, asked the writer to make some experiments with one of these cooking chests. The experiments were made with a simple and inexpensive chest that had been used in cooking. The chest consisted of a common wooden packing box, measuring on the inside twenty inches long, by twelve and one half inches wide and fourteen inches deep. This box was lined on the inside with heavy corrugated paper and filled two inches deep with sawdust, and covered with heavy wrapping paper. The sides were then lined, three inches thick, with excelsior, and wadded with woolen blanketing, securely tacked on. Inside the box was then placed a tin bread-box (costing twenty cents), and for the whole chest a loose wooden cover was made.

The first experiments were made to find out how long cold water can be kept cold in such a storage chest. The water used was from a very cold well and was carefully tested before and after each experiment with a Fahrenheit thermometer. In the first experiment an enameled-ware pail, holding four quarts, and having a tight cover, was filled with well water at 40° Fahrenheit. The pail was placed in the tin box and wrapped in heavy burlap, and the box closed and completely covered with a heavy blanket. Over the blanket was laid several newspapers, and on these was laid the wooden cover, with a weight on top to keep it pressed down air-tight. The chest was closed exactly at twelve noon. Seven and a half hours later the chest was opened and the water found to be 54°. In the next experiment the pail, filled with water at 47°, was packed in the chest at half-past seven P. M. At eight the next morning the water was 54°. In the third experiment the water, at 45°, was placed in the chest at eight in the morning, and when taken out at noon was 48°. These experiments show that, by the aid of such a chest, water can be kept cool twelve hours or more.

In a fourth experiment, a quart can of milk was placed in the pail, the water being 44°. The milk-can, before being placed in the pail, was chilled by letting it stand in another pail of water fresh from the well, in order to prevent the can from raising the temperature of the water. The pail and milk-can were placed in the chest and remained there five hours, when the milk was found to be 52°, and a glass of

Live Stock and Dairy

the milk was tested by several persons and pronounced cold and refreshing.

Two experiments were made with well water in keeping butter. The pail was filled half full of water at 50° and a tumbler inverted in it. On top of the tumbler was placed a dish of butter and the chest closed at nine A. M. It was opened six and a half hours later and the butter was firm and hard. In the second experiment the pail, full of water at 48°, was put in the chest without the cover and a dinner-plate laid over it and on the plate was placed some print butter and cream cheese. The chest was closed at half-past two P. M., and on opening the chest at half-past six the thermometer resting on the butter showed it to be 54°. The chest was closed again and reopened at half-past six the next morning, when the temperature was found to be 56°, and the butter and cream cheese were firm and hard, and were served on the breakfast-table. In this experiment the water kept the butter hard for sixteen hours, and had milk been placed in the chest with the butter, it would have been cold and just at the right temperature to serve on the table. In another experiment a small quantity of ice was added to the pail of well water. This reduced the temperature to 42°. The chest was closed and not opened for twelve hours, when the water was found to be 52°, showing a very great economy of cold.

The experiment shows that it is possible to keep milk and butter cold in such a storage box. Such a box would hold an ordinary wooden pail in which could be placed four milk-bottles resting in the water up to the tops. All that is necessary is that the box must be well wadded with excelsior, straw or sawdust, kept in place

As such he ought to be interested in acquiring a knowledge of the best ideas and methods that are in use among the best dairymen, for these are the money-making ideas and methods. Every such member should be a reader of a good dairy paper. They could easily club together, through their secretary, and get reduced rates. Then there are bulletins from the experiment stations and the important books that every farmer ought to have in his home. All these could be obtained at reduced cost.

2. There is the purchase of pure-bred bulls. All patrons do not like the same breed, even if they do want a dairy-bred bull. Suppose one wanted a Holstein, another a Guernsey, another a Jersey and another an Ayrshire, and in all there were fifteen to twenty of such bulls wanted. How much better it would be, say, to confer with some energetic breeder and arrange with him to select good representative animals of all the breeds wanted, have him select the different bulls and ship them in a car-load lot to the club. All this could be easily arranged with a little correspondence on the part of a bright secretary, and a good saving effected in the cost of freight. At Fort Atkinson or Lake Mills, Wisconsin, for instance, bulls of all these breeds could be delivered by wagon from neighboring breeders and sent out as we have described. If the patrons were all agreed on one breed, which in some respects would be better, the advantage would be still greater. Then they could exchange heifers with each other, or exchange bulls, and so avoid excessive inbreeding. In this way bulls could be kept to much greater age than they usually are.

3. In the purchase of machinery, fertilizers, clover and alfalfa seed and seed grains, the advantage in dealing in a body as a club, is very great. During the winter they could



IMPORTED SHROPSHIRE

with woolen or burlap, and that the pail of water be placed in a tin box that can be taken out and washed, if any water or milk is spilled while packing the box. The well water used in the experiments was unusually cold, but any water can be chilled to 40° or 45° Fahrenheit with a small piece of ice and then kept cold for many hours. The box might also be made larger. Several boxes could be used when a large quantity of milk or butter is to be stored.

CHARLES BARNARD.

What Can a Farmers' Club Do for a Creamery?

"Hoard's Dairyman" tells what a farmers' club can do for the patrons of a creamery or cheese factory as follows:

In the first place, every creamery or cheese factory is a club. The work of organization for cooperative benefit has already been accomplished to the extent of pooling their milk for the making of butter or cheese. It is comparatively easy, as many have found, to form a wheel within a wheel, or a cooperation club for such as can agree to bring larger benefits in other directions. We believe it ought to be done in every creamery or factory. There ought to be enough if members who can see these advantages work together to secure them. We will enumerate some of the advantages we see.

1. The promotion of useful and important knowledge. Every man is a dairyman.

easily meet several times and discuss some important topic of great mutual benefit to them. Each farmer could make out a list of the machinery he intends to buy. Any dealer would be willing to make a liberal discount if he could get the united trade of such a neighborhood. Suppose forty farmers wanted each four bushels of clover or alfalfa seed. They knew they wanted only good seed, but just where to get it at reasonable cost is a serious question. One man, the secretary, could easily determine this fact by correspondence, and the seed could be bought much more reasonably as one hundred and sixty bushels than in dribble lots. There is hardly a single line of action that does not present a big advantage through the organization of a live working club among the patrons of a creamery. Nothing hinders such an organization except the lack of a spirit of intelligent cooperation with each other.

In Denmark and other countries of Europe, the business of the farmers is very largely done through such cooperative agencies. They manufacture their butter, bacon and other pork products that way and also purchase their feed, fertilizers, machinery and household supplies. All that is needed is a little good business sense, the selection of a live, intelligent secretary and the payment to him of a fair percentage as his remuneration. The creamery and cheese factory organization ought to be taken advantage of to work up these larger results, for the opportunity is there.

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### What is a Mineral?

A. J. I., Maryland, writes: "I am thinking of buying a farm on which is a flagstone quarry. The mineral and mining rights have been excepted by a lumber and manufacturing company that has cut timber from this property. Can this lumber company class this quarry as mineral, if the stone crops out on the surface?"

The word "mineral" ordinarily includes such things as were taken from the mine in the earth. This definition has been somewhat broadened, and might include things that were taken from the surface of the earth. Where stone has been taken from a mine and not from the surface of the earth, it might be included as a mineral, but I think generally where it is taken from a quarry or from the surface of the earth a reservation of the mineral and mining rights certainly would not include such stone.

### Support of Wife of Illegal Marriage

R. M., Ohio, asks: "If a woman who had been married once marries again, not being divorced from her first husband, can she force her second husband by law to support her. He deserted her over a year ago, not knowing for certain whether she was divorced from her first husband or not?"

The wife to whom the man was illegally married could have no claim against him for her support, as the basis of such claim is a marriage, and so long as the first husband is living the woman can sustain no other relation except that of being a wife by an illegal marriage.

### Statute of Limitations

G. E. B., Rhode Island, asks: "Can a personal note, given without security, on which nothing has been paid for more than six years, be legally collected? Can recently acquired property be attached for a bill that has been contracted eight years before?"

If the note be given under seal, and has that character attached to it, where it is treated as a specialty, then the dates to limitation on an ordinary account would not apply. If a judgment can be gotten, it does not make any difference whether the property has been acquired since the debt was incurred or before, the only question being whether the party has property that can be reached when execution is issued on a judgment.

### Selling Timber Near Boundary Line

E. C., Tennessee, writes: "A. and B. own land joining. A. lives in town and sells timber to different unreliable parties. They go and cut timber on B.'s side of the line. Who is responsible, A., who sold the timber, or the parties who cut the timber?"

It would depend somewhat upon the arrangement between them, but undoubtedly the contractor would be liable. Whether the landowner would be liable also would depend upon the fact whether he authorized, or in any manner contracted with the contractor to take timber beyond the correct boundary line.

### Lands Sold on Execution to Pay Debts

M. J. A., North Carolina, asks: "A. gave his daughter seventy-five acres of land. She married, and her husband mortgaged the land, but could not meet his payment. The time being out for his mortgage, the mortgagee had the land sold. He did not get the deed from A.'s daughter, but the court gave him one. He is worth about \$1,500. Can he sell said land and give a good title or deed, or would it be dangerous to buy it?"

This land could not be sold to pay the husband's debt, unless in some manner the daughter became liable for that debt. The deed by the sheriff would only convey whatever interest the husband might have in that property. Without further knowledge I could not say that it would be a good title.

### Title of Land Bought for Debt

M. J. A., North Carolina, asks: "If land belongs to heirs, all grown, and a man bought it for debt, and held it for twenty-three years, can the heirs come and dispossess him?"

At any time within twenty-one years after arriving at the age of majority they might come into court and dispossess him, unless they were in some manner bound by the original action on the debt for which the land was sold.

### Interest in Real Estate

A. C. S., Pennsylvania, says: "A. had fifty-six acres of land. He died, leaving a wife and five children, all girls. He made no will. One of the girls got married and had children, and she died. B. married one of the girls, and she died. Does B. have any interest in the fifty-six acres? If so, what? A.'s wife is living on the fifty-six acres, and the rest of the children are all married. Who is to keep her? Can

## The Family Lawyer

Legal inquiries, of general interest only, from our regular subscribers will be answered in this department, each in its turn. On account of the large number of questions received, delay in giving printed answers is unavoidable. Querists desiring an immediate answer, or an answer to a question not of general interest, should remit \$1.00, addressed to "Law Department," this office, and get the answer by mail.

she sell all the property? What interest does she hold, and how is she to be provided for, or would it be best to have a guardian provided for her? One of the children wants all the place to keep her mother, and the mother don't want to live with this one."

When A. died without a will his wife had a right to use one third of his real estate during her lifetime. The other two thirds at once went to his children, and this one third that the wife had would go to the children at her death. The wife could not sell it, nor could any guardian for her. All she can do is to use it. The husband of one of the children, if the child lived after the father, might have the use of her part during his lifetime. At his death it would go to the children of such child or back to her brothers and sisters. Any one of the children cannot make any bill for keeping the mother that will eat up the entire estate, or any part of it, unless the children agreed to it.

### Fence Along Private Road

S. S. J., Ohio, writes: "A.'s farm is entirely surrounded by other farms without an outlet to a public road. The township trustees appointed viewers, who granted him a road through B.'s farm, but required A. to pay for it. This road now has a fence on each side, but no gate at the end next to the public road. Who must maintain those fences, since it now requires two fences?"

The road established by the township trustees is in effect a public highway, and consequently the adjoining landowners will be compelled to keep up the fences. The cost of this fence should have been considered when establishing the road, and constitute one of the elements of damage to which the landowner was entitled when the road was granted.

### Right to Compel Public Authorities to Put Ditch Along Road

J. W. T., Ohio, inquires: "I would like to know if I can compel the township trustees or commissioners to open a ditch in front of my place so that the water from the road will not flow over my place, and also straighten the creek so it will not force the water back over my place every time there is a freshet?"

It will depend upon the fact whether or not they have in any way interfered with the natural flow of the water. If they have you have a measure of relief; if not, then you are without remedy, unless you have a public ditch established or proceed under the law to have the creek cleaned out.

### Widow's Rights

J. G. G., Ohio, inquires: "A. bought a house and some lots and had them deeded to his wife and her heirs, naming the heirs. A. being dead, can his wife dispose of said property, either all or part, without the consent of the heirs?"

My opinion would be that he gave the wife a half interest, and the heirs the other half interest, and that the wife might dispose of her half, or, if there were other heirs, of her equal share of the property without their consent.

### Liability for Leasing Land Belonging to Another

W. N., Ohio, writes: "A has a farm, and A.'s wife has a piece of land. Oil men came around, and A. leased his and his wife's land to them without her consent. A.'s wife then sold her land. The buyer, finding out that A.'s wife had never signed any lease, leased it to another company. Can they hold A. responsible for the lease?"

The husband had no right to lease the wife's land, but unless he in some way represented that he was the owner in fee of that land he would not be personally responsible. If he did represent that he was the owner of the land leased, which in fact belonged to his wife, then he would be responsible.

### Foreclosure of Mortgage

E. B., Ohio, asks: "Can a mortgage given for ten years, with notes coming due every year, be foreclosed? The interest is to be paid annually on the whole valuation of said mortgage. If interest is being paid annually, can they foreclose on the whole mortgage?"

A mortgage cannot be foreclosed so long as the conditions therein imposed are

complied with. If one payment is due and not paid, then it might be foreclosed as to that payment, unless the party had agreed otherwise. The foreclosure of one payment might necessitate the sale of all the land, and the court would then order it all sold and apply the proceeds upon the mortgage.

### Birth of Child After Making Will—Will Made by Testator

P. B., Tennessee, inquires: "(1) Shortly after marriage, a wife owning property in her own right made a will, bequeathing all her property, real and personal, to her husband. Is the will invalidated by the birth of children afterward? (2) Is a will construed under the laws of the state in which it is drawn, or under the laws where it is probated, and where most of the real property is? (3) Is a will entirely in the handwriting of the testator valid without signatures of witnesses?"

(1) As a general rule the birth of a child after the making of the will may not make the will invalid, but so far as the child is concerned it will be the same as if no will had been made the child receiving the portion it would have received had there been no will. (2) So far as a will may affect real estate it is generally given that construction that is given to instruments of that character where the real estate is situated. As to its formal parts, it would be construed according to the laws of the place where it was made, such as its making, execution, etc. (3) According to the laws of Tennessee, where a will is entirely in the handwriting of the testator, and his handwriting is proven by at least three credible witnesses, it will be a valid will if it has his name subscribed to it or inserted in some part of it.

### Statute of Limitation in Reference to Mortgage

M. M. W., Ohio, writes: "Can a mortgage become outlawed in this state? If so, how long does it remain in force?"

A mortgage in Ohio given to secure a debt or a promissory note, is barred whenever the debt is barred, and a promissory note is given for fifteen years from the time it is due, or from that time after the last payment has been made thereon. There is another remedy on a mortgage which, if pursued, the mortgage will be good for twenty-one years from the date of its execution.

### Fences Along Public Highway

J. T. W., Ohio, asks whether it is lawful to fence a public road with barbed wire?

There is no law in Ohio requiring anyone to erect a fence along a highway. If he does erect a fence he may put any kind there that he may choose, except that hedge fence is not to be allowed to grow more than six feet in height. The only liability a person might be under with a barbed-wire fence along the highway is, if some stock that was driven along the highway should happen to be hurt, or some person that was driving along the highway should be hurt by reason of the careless or faulty construction of such fence.

### Turning Back Stream of Water Diverted for Sixty Years

D. B. H., New York, writes: "H. and J. own adjoining farms. A stream of water flows across the farm owned by H. J. obtained permission from H. to turn the water across his farm for the purpose of watering his stock. He dug a ditch sufficient to carry the stream into the ditch, where it ran for more than sixty years. Have the present owners of the farm owned by J. any right to turn back where it at first ran over sixty years ago, or will he have to take care of the water?"

I do not think that the present owners of the farm would have any right to turn the water back where it first flowed.

### Perplexities of a Young Married Man

C. T., Ohio, writes, and wants me to be sure and answer in the next issue. I again call attention to the lines at the head of this department. C. T. says: "I am a young man, and have been married a little over one year. In that time my wife and I have found out that we do not love each other. She is unwilling for a divorce, as she wants to get all she can out of me. We have no children. I make \$16.50 a week. She wants me to give her \$8 out of it and live by herself. I don't

see that I can do anything in the divorce line, as she gives me no chance. She is a good girl at heart, but her heart craves a good time all the time. I am a saving man, having no bad habits. I am at home at six every night."

If you furnish or offer to furnish your wife a good living, she is bound to live with you. If she goes elsewhere, she must take care of herself.

### Interest in Real Estate Under Deed, etc.—Lease of the Same

J. E. W., Ohio, writes: "I have bought a five-acre lot which was deeded to A. J. and her heirs, and their heirs. A. J. gave a quitclaim deed for her claim. I also bought one of her heirs out, and she gave me a warranty deed, and there are two more heirs not of age yet. This five acres is in Licking County, in the gas and oil territory. Have I a legal right to lease the five acres or not? A. J. is still living.

If A. J. only had a life estate, then that would be all that she could convey. This life estate would not allow her to open up a new coal mine, nor gas nor oil well, and you would have no right to lease it for that purpose, because you could not lease the interest that belongs to the minor heirs. Have a guardian appointed for these minor children, and you and the guardian under order of court can make a lease of the premises.

### License to Sell and Manufacture Articles

T. T. S., Ohio, asks: "Can a man manufacture silver polish or other articles and sell them whenever or wherever he wants to, without first taking out a license? Does an agent have to have a license to sell goods for a company?"

There is no general license law in Ohio. Some cities may have ordinances to that effect. Generally in this state a man can manufacture and sell anything that he chooses, unless it is some article that requires a license from the United States Government.

### Promissory Note Not Having Revenue Stamp Attached

E. N. J., Pennsylvania, inquires: "I have a non-negotiable judgment note drawn when the war-revenue act was in force. The maker failed to place a stamp on the note at the time, and neglected to do so afterward. Can the note be collected? If not, what can I do?"

The general rule is that if a promissory note is not stamped as required by law, that the failure to put on such stamp does not destroy the validity of the note, unless the parties refrained from stamping the note for the purpose of evading the stamp act.

### Desertion of Family, etc.

J. M., Pennsylvania, asks: "If a man with wife and children goes away to work in another state, and after a while refuses to support his family, and marries another woman, what is the penalty? Who would bear the costs of prosecution?"

Marriage can only be dissolved by death or divorce. If one of the parties married without the marriage relations being so dissolved, he is guilty of bigamy under the laws of all the states, and that is a penitentiary offense. The state usually bears the expense of prosecution.

### Damage by Neighbor's Timber

B. D., Ohio, inquires: "A.'s and B.'s farms join. There is big timber on the line which damages A.'s farm. Can A. cut it? B. has his fences fastened to it, and they are not marked as line trees."

A man has a right to use his land as nature put it, and if there are large trees thereon which should happen to damage a neighbor by their shade, etc., that neighbor cannot complain. It is an old adage in law that "the owner of the soil owns from the center of the earth to the sky."

### Signing Away Right, etc.

J. A. H., Ohio, inquires: "I have received my full share of my father's real and personal property, and have signed my right away before a notary public. Can my wife, not having signed the article, have a lawful claim on my father's estate after his death and mine, or did I sign her right away?"

You could not sell an interest you had in real estate that would bind your wife, without her signature or consenting to the same. However, if you received real estate in return for your signing away, that is, if there was a mutual partition of the real estate between the heirs, it would be good, although she did not sign it, she having her interest preserved by the property required by the mutual exchange.



## The Grange and Ship Subsidy

THE position of the National Grange in opposition to the ship subsidy bill was stated in a communication to the Committee on Merchant Marine and Fisheries of the House, as announced in the April issue of the "Bulletin," said protest being signed by the legislative committee for the National Grange. The signing of this protest by the master of the National Grange as a member of that committee precipitated a vigorous attack by Senator Gallinger, of New Hampshire, the author and prime promoter of the bill, based mainly upon political reasons and the claim that as an ex-governor of a Republican state, he should not have attached his signature to a protest against a measure that all the Republicans of his state favored. The Master of the National Grange made reply, and the position taken therein has such broad application to the grange and public office in general that it is here given in full:

"Hon. J. H. Gallinger, senior senator from New Hampshire, in a published interview in a morning paper, gives such prominence to a statement to the Committee on Merchant Marine and Fisheries in opposition to the ship subsidy bill bearing my signature, with others of the legislative committee of the National Grange, that a public statement seems called for, much as I detest and refrain from public discussion of somewhat personal affairs. Our good senator, for whom the people of New Hampshire have great admiration, seems to have the impression that my action was of a personal or political nature, or in a matter in which I had discretionary powers rather than as an officer of the National Grange, acting under its instruction.

"I am sure that no one seriously questions my loyalty to my political party when acting personally, or officially in a partisan position to which I have been elected by a partisan vote, and I fail to see why anyone should accuse me of partisanship in the opposite direction in executing a trust reposed in me by a non-partisan farmers' organization.

"In 1899, Mr. Alexander R. Smith, of New York, representing persons engaged in the shipping business, sought and obtained interviews with officers of the National Grange, and appeared before that body at its annual meeting in Springfield, Ohio, in November of that year, in an effort to commit the National Grange to the ship subsidy proposition. After listening to his lengthy argument the National Grange, with representatives from twenty-six states present, unanimously adopted the following resolution:

"That while this National Grange does most heartily desire the upbuilding of our merchant marine, we are emphatically opposed to the principle of subsidies, and believe the desired results can and will be accomplished without resorting thereto."

"This position of the National Grange has been stated and unanimously reaffirmed at every annual session to, and including, 1905, and the statement of the legislative committee signed by Aaron Jones, of Indiana, Elliot B. Norris, of New York, and myself, two Republicans and one Democrat, represents the position of the National Grange in this matter. The honorable senator says I ought to have consulted Republicans before attaching my signature to the statement, which might be true, were I acting in an individual capacity, but when I am acting for a great national, non-partisan farmers' organization, representing thirty state organizations and about a million members, upon a policy that has been unanimously endorsed at seven annual sessions in succession, I do not consider it my duty to consult either Republicans or Democrats, the honorable senator to the contrary notwithstanding.

"I have always made it a rule to concede the greatest liberty to members of the grange in acting individually in political matters, and hold that there is nothing wrong in the holding of political office by officials of the grange so long as the organization is not made to serve the personal or political interests of the individual or the party represented, and I also concede the liberty to any person to act for a non-partisan farmers' organization upon matters in which it has taken a position, without having his individual loyalty to his political party questioned. The policy involved in the statement of the legislative committee of the National Grange was not established by this committee for the National Grange, but was established by the National Grange itself by unanimous endorsement, and the members of the legislative committee would have been recreant to their trust had they neglected to perform the duty assigned them. My great admiration for the honorable senator and confidence in his good judgment leads me to think that he made the interview public without a correct understanding of my prerogatives in the matter."—N. J. Bachelder.

## The Grange

### Prof. Henry A. Weber

The history of this country would have been far less rich, its achievements less glorious had Henry A. Weber never lived. A kindly, genial soul, given over to investigation, seeking to read nature's secrets, revealing those things which make the world richer, and life easier and fuller for humanity, is worth the while of the greatest mind. And only the great minds seek these ways of expression. As a scientist, Doctor Weber stands preëminent to-day. As an authority on food and drug adulterants an incident will demonstrate his position in the world of science. One of the large manufacturers of pickles, anxious to find a preservative that was the least injurious to health, sent an expert to Germany to find, if he could, some method of preparation or some preservative that would secure the desired result and not injure health. From university to university he journeyed, and from noted chemist to noted chemist, till at last he came to Würtemberg. "Go back to your own country for authority," responded the scientist. "There are but two authorities in the world; one is Professor Keller, of Moscow, and the other Doctor Weber, of Ohio State University."

Henry A. Weber was born in Franklin County, Ohio. He studied in the common schools and at Otterbein College; spent several years in the universities of Germany, returned to Ohio, became assistant chemist to the Ohio Geological Survey, which position he held from 1869 to 1874, and where his eager mind acquired valuable training. Professor of Chemistry, University of Illinois, 1874-1882. Discovered a process of manufacturing sugar from sorghum on a commercial scale, 1882-1884. Professor of Agricultural Chemistry, Ohio State University, 1884, which position he now holds, bringing credit and



PROF. HENRY A. WEBER

renown to the university. He was chemist to the Illinois State Board of Agriculture and to the Board of Health from 1874 to 1882. State Chemist and Chief Chemist to the Ohio State Dairy and Food Commissioner from 1884 to 1897. In addition to these official positions he is likewise a member of many of the scientific associations which are doing so much to bring good to humanity.

In response to an urgent request from the chairman of the Educational Committee of the Ohio State Grange, Doctor Weber is now placing in permanent form some of the results of a lifetime's study and investigation that they may be available for this and future generations. It were a pity for so much of excellence and worth to be unrecorded. Several large publishing firms are eager to secure the right to print the work.

Doctor Weber is associated with Doctors Wilcy, Scoville, Jenkins and Freer to establish standards for pure-food products. These standards, submitted to the secretary of agriculture and promulgated by him, become the measure for determining relative purity and wholesomeness of manufactured foods. If the Hepburn bill fails to pass the House, which now seems likely unless urgently urged, this commission will be unable to act. No greater advance has been made in pure-food matters than through this committee.

### Notable Legislation

The enactment of laws providing for regulation of railway rates, denaturalized alcohol and pure food, is a matter of great import to the people. Such legislation was inevitable, and the chief thought is that we are so fortunate as to live in a time when the moral conscience has advanced to that point that it will work determinedly for justice. The value of the laws will not be known till the courts have pronounced upon them. Watchfulness is needed that the good be not corrupted. In fact, there should be shame that so much effort was required to secure simple justice when the power for securing it rested with the people. Will the people be more alert? Will they have more honesty? That is the only name for it. An honest public conscience would not have permitted the abuses to grow.

So long as the tendency of the mind is to accept tradition for truth, custom for good, then will there be similar suffering. It is the inquiring mind that asks whether a thing be good for it or not, and that is willing to seek good at whatever cost, that will conserve the victory gained and aid in securing others. Let us be thankful that a beneficent nature permits us to live in a time when even this much advance is made.

### New Demands

The people will now turn their attention to securing parcels-post, better administration of public trust, greater economy and efficiency in office, better roads, better schools, better pure-food laws, better transportation laws. And with all this getting they will get for themselves a better understanding, which is one of the commands of the wise Solomon.

I recently heard the great minister, Doctor Rexford, say that true religion was the interpretation of things, knowing God through his handiwork. Seeing beauty in all created things that were normal and natural, and perceiving the spiritual relationship of man with nature and with nature's God. And the new awakening will embrace all this.

Liberal thinkers look with calm serenity at the march of events. They have advocated a greater civic and moral integrity, less subservience to custom, higher individual courage and persistency, and an insistence upon what Herbert Spencer calls the "adjustment of the inner to the outer relations." They knew, despite the cant, the weak-kneed subservience to custom and tradition, that God would, in his own good time, bring justice. That he worked through the agency of man, and only in the rise of the human race could justice be attained. There must be just so much suffering to bring humanity to a realization of its worth, duty and significance. They knew the weakness of human faith in the eternal justness of things, but they lost not courage or trust that in the beneficence of nature all good would finally come. That evil could not permanently exist; that truth and purity and uprightness were alone beautiful and divine. To them, in whatever field they were found, in the church, the grange, in the fields of trade, in civic leagues, they kept the light burning that would lead men and women "from stepping stones of their dead selves to better things." The new awakening is a logical development. It will grow in just that ratio that men and women are true to the inner promptings and seek the kindest way of expressing them.

### July Fourth

Granges all over the country will convene to pour out their patriotic fervor on this day. It will not be a forgetfulness of the deeds of those who fought for liberty if they say little about the history of what others did, but take note of what they, in their time, can do to make this world a little happier and better. People are coming to believe that real patriotism consists not so much in recalling the history of other men's deeds as in interpret-

ing the needs of to-day, and satisfying them. Is there not work for us to do to-day? Have the aspirations of the heart ceased climbing heavenward? Have all the deeds been done for humanity that can be done? Are there no songs to sing, no music that will express the longings of the human heart, or must we satisfy ourselves with the ceremonies of the past? Shall we not be in our time and with our light beacons to another time even as they lighted our pathway? Was all virtue and glory in the past? Were humanity's needs satisfied over a hundred years ago, and we left stranded with no opportunity to act? Believe it not. Every impulse of the normal heart to do good is a divine command from on high to do that good. If we fail to obey the behest, if we are too cowardly to battle for the truth and right, then the "spirit will cease striving."

The grange is a realized ideal of the human struggle for truth and good and opportunity to act. Work through it, humbly, keeping in mind ever that what the Lord requireth of us is to do justly, love mercy and walk humbly with thy God. Your own desire is the lead and the command. Obey it, and thus bring good to all.

### The Scandal of Packingtown

The disgusting and repulsive revelations made by Upton Sinclair and the government commission appointed to investigate the conditions of those plants where the sustenance of millions is converted from raw material into the finished product will aid in remedying the conditions. The packers will learn speedily that it pays to be honest. Their sales will fall off immensely because of the sickening revelations. If only a hundredth part of the revelation be true it shows a condition so revolting as to make it an epoch in the history of crime. No punishment too severe can be meted out to those who, for the mere love of gain, wantonly sacrificed the health of those who paid them liberally for food to gain sustenance to fight the battle of life. The packers are making a prodigious fight to suppress the revelations and pacify the public mind. It will be useless. True, diseased intellects will waste maudlin sympathy on them, just as they do any criminal, and the more hideous the crime the more abundant the diseased sympathy. But the revolting fact stands that to gain a little more money, filthy and diseased meat, handled under the filthiest conditions, was placed without a punctious scruple on the market. There is no excuse. They knew they were criminal. If they did not know it, then they should be committed to some safe insane asylum where their diseased minds could not longer foist such iniquity upon the people.

### President Roosevelt and the People

Attempts are being made in certain circles and by certain papers to stultify President Roosevelt in the minds of the people. He is too honest and too shrewd to be a safe man for the interests they represent, therefore every cunning device is resorted to to undermine him. Mistakes he has made and will make, but he more nearly voices the sentiment of the honest men and women than any man who has been in so conspicuous a place for years. His heart is right, and he has a sane head to guide the dictates of the heart. The great heart of the people is touched by the heroic efforts of the president to break down precedent and blaze a way to the best good for all. There is no politics about it. It is the intense manhood of the man that appeals. They are willing to condone the mistakes. After all, just what are they? It were well for those who have such an abiding interest in the "dear people" to stop feeding at the public crib they fill, and go out and earn an honest livelihood by the sweat of their brows, instead of scheming to undermine one who represents their ideal of forcefulness and integrity.

### The National Master and the Ship Subsidy

All honor to National Master Bachelder for his firm stand against critics for his obedience to the unanimous instruction of the National Grange to use every honorable means to prevent the enactment of a ship subsidy law. The organization is safe in the hands of a man of such integrity and honor. No man can safely ignore the instructions of the organization which entrusts him with certain duties. Nor can he do it with honor to himself. It is a source of gratification that the national master is made of the right stuff to act honorably, do nobly.

*Mary E. Lee*



### The First Reading of the Declaration of Independence in Boston

NEWS traveled slowly at the time of the Declaration of Independence in our country, and it was sometimes weeks before the people knew of events of the utmost importance that had occurred in distant parts of the country. The postal service was very inefficient and telegraphy had not yet been thought of. No doubt it would have been scoffed at had anyone suggested such a thing, or it might have been taken as a sign that the person proposing to make use of electricity was in league with the evil one.

Thus it was that it was not until the eighteenth of July in the year 1776 that the people of Boston knew of that tremendous event, the signing of the Declaration of Independence in Philadelphia. Then there was great excitement in the town, and the narrow and crooked streets were filled with eager and excited people. They gathered around that famous old building which is to-day one of Boston's most cherished landmarks, the Old State House, and the splendid Declaration was read to the people in the streets below from a small balcony above the door. Just previous to this it had been read in the council chamber of the building, and we are told by historians that "The gentlemen or officials who had assembled to hear it, stood up, and each repeating the words as they were spoken by an officer, swore to uphold the rights of his country."

After this the town clerk went out upon the balcony and in a loud voice read the Declaration to the people, and "at the close a shout begun in the hall, passed to the street, which rang with loud huzzas, the slow and measured boom of cannon, and the rattle of musketry."

Then there was a grand banquet in the State House, "where the richer citizens appeared," and throughout the town "undissembled festivity cheered and brightened every face."

In the height of their enthusiasm men and boys went about Boston tearing down emblems of royalty and the signs of the Tories, which they made into a great pile and burned in front of the "Bunch of Grapes Tavern," which was but a short distance from the State House. The lion and the unicorn were torn from the State House and burned, and those one may now see on the building are copies of the original. They were replaced because it was rightly felt that the building would be more interesting as an object of historic interest if these emblems were again placed on it. A few years later, when George Washington visited Boston, he reviewed a great procession in his honor from the State House, which is given an additional interest by reason of this fact.

It is interesting to have some account of this first reading of the Declaration of Independence in Boston from one who was there to hear it read, and this interest is increased when we know that the one to leave behind this written account was no less distinguished a person than Abigail Adams, wife of John Adams.

John Adams was at the time in Philadelphia, where he had signed the Declaration, and three days after it had been read in Boston Mrs. Adams sent her husband this letter:

"Last Thursday, after hearing a very good sermon, I went with the multitude into King Street to hear the Proclamation for Independence read and proclaimed. Great attention was given to every word. As soon as he ended the cry from the balcony was 'God save our American state!' Mr. Bowdoin then gave a sentiment: 'Stability and perpetuity to American independence.' Thus ends royal authority in the state, and all the people shall say 'Amen!'"

A British officer published in a paper in England an account of the reading of the Declaration in Boston, and in this account he says: "As we passed through the town we found it thronged. All were in their holiday suits; every eye beamed with delight, and every tongue was in rapid motion. The streets adjoining the Council Chamber were lined with detachments of infantry tolerably equipped, while in front of the jail artillery was drawn up, the



## Around the Fireside

gunners with lighted matches. The crowd opened a lane for us, and the troops gave us, as we mounted the steps, the salute due to officers of our rank. Exactly as the clock struck one Colonel Thomas Crafts, the occupant of the chair, rose and read aloud the Declaration. This being finished, the gentlemen stood up, and each repeating the words as they were spoken by an officer, swore to uphold the rights of the country."

It should be added that the writer of this letter was one of several British officers who were prisoners of war, and it would seem rather like "rubbing it in" to invite them to come and hear the Declaration read, but we have the officer's own word for it that this was done.

J. L. HARBOUR.

### First Declaration of Independence in America

THERE is no more dramatic chapter in Colonial history than the story of the first American Declaration of Independence, which took place a hundred years before the Colonial Congress passed their famous act in the State House at Philadelphia in 1776. It took place on the Fourth of July, making that date doubly a famous anniversary.

At last one of the Virginians, a brave and able young man by the name of Nathaniel Bacon, declared that if he heard of another white man being killed by the Indians he would lead a force against the savages without the governor's commission.

Not long afterward the Indians rushed in and killed several white men on Bacon's own plantation. The young hero was as good as his word. He gathered a force of freeholders and set off after the red men. As he marched along the plantations the white planters came out all armed and crying: "A Bacon! A Bacon!" to join him. At the head of six hundred "well-armed housekeepers" he swept upon the Indian towns and inflicted injuries upon them that quite disheartened them. Meanwhile Berkeley had proclaimed him a rebel, and a force of militia was sent to arrest the daring young Virginian. But the people stood by their leader, and the governor was forced to make peace with them by promising to let them choose a new legislature.

The new Assembly gave Bacon a commission as general to fight the Indians, but Berkeley refused to sign it. As some of the Assembly sided with the governor, the young planter went home to his clearing on the James. But the country was all on

"No, your honor," he said, "we will not hurt a hair of your head, nor of any other man's. We are come for a commission to save our lives from the Indians, which you have so often promised, and now we will have it before we go."

The governor and the burgesses talked it over, but nothing was done that night. But the next morning Bacon and his followers surged into the hall of the Assembly, sword in hand, and amid cries of "We will have it; we will have it," Berkeley was forced to sign a commission. It was a great triumph for the Virginians. At the same time the legislature, yielding to the importunities of the people, passed some good laws for their long-delayed relief. These laws were remembered long after Nathaniel Bacon's death, and were known as "Bacon's Laws."

In the warm sunlight of the July day, and while the mists of morning still lay around Jamestown, Bacon and his men marched away. He and his "well-armed housekeepers" disappeared, and "Bacon's Rebellion" passed into history. But the incident shows how, even in those early days, the spirit of resistance to tyranny and oppression lived in the hearts of the American people.

### The Day We Celebrate

EVERYONE, young or old, great or small, should participate in some sort of fitting celebration of the Fourth.

Decorate! Let every home in our broad land look radiant with the beautiful colors of our national banner, attesting the enthusiastic and patriotic spirit of the greatest nation of the earth.

"The spirit of '76" is still alive, and "Young America" must be given full sway, as it were, in keeping green the glorious memory of Independence Day. The small boys' and girls' part in the celebration is an important one and a large one.

They will have the crackers, torpedoes, caps and pistols, and parents should take special pains to carefully warn them of the dangers common to the day, and give them such instructions as may be necessary and expedient in preventing, so far as possible, any injury in connection with their part in the celebration. The best way for parents to do with the real small patriots is to join them in the day's festivities; help them "on the firing line," superintend the explosion of the more dangerous fireworks. Every boy and girl should have fireworks on the Fourth, and it is up to the parents or older folks to see that they have them, and of the proper kind.

It is quite noticeable that city folks who can will spend the day out of the city, usually in the country's wooded parts, while those from the farm usually "come to town." The custom of holding picnics, especially family picnics, on this day, has long been popular, and each year it seems to be growing in favor, and should be encouraged.

Every year the usually large number of serious and very regrettable acci-

dents and injuries are recorded—eyes destroyed, fingers blown off, faces disfigured, painful burns inflicted, and hundreds of homes destroyed throughout the country owing to the careless and foolhardy manner of handling the explosives. The fool is always abroad, courting injury. Keep away from him.

But to "Young America" the day must be taught to mean more than the simple boom of powder. Indeed, the greatest celebration that parents can give to the day is such form of entertainment as will enlighten the little folks upon the day's history and impress indelibly upon their minds the important incidents of the early days of our government—the "times that tried men's souls." There are many different ways of such instructive entertainment and celebration that will delightfully appeal to the young folks and thus remove them from the always more or less dangerous explosives. On the Young People's page of this issue will be found some excellent suggestions along this line of entertainment that are both entertaining and instructive. It may be well for you to read them.



READING THE DECLARATION OF INDEPENDENCE FROM THE BALCONY OF THE OLD STATE HOUSE, BOSTON, JULY 18, 1776

History tells the story of 1676, when in Virginia lived Sir William Berkeley, a sturdy old aristocrat, who had been appointed governor by Charles I., and who had managed to get all controlling power into his hands and those of his friends. Berkeley was a selfish old tyrant, and he and his friends became immensely wealthy at the expense of the poor planters who were becoming poorer.

Just at this time to make matters worse, an Indian war broke out. All along the frontier the savages rushed in upon the defenseless settlers, inaugurating a reign of terror. Several hundreds of the whites were massacred. Governor Berkeley was petitioned for aid, but he and his friends were making a good deal of money out of the fur trade, and if troops were sent against the Indians this profitable traffic would be stopped. So he refused the military assistance they asked for.

The people murmured, but they could not help themselves, and Governor Berkeley strutted round in his velvet and lace and jewels, and kept adding to his heap of gold pieces, while the Indians continued their inroads. It was a very distressing

fire. Men's minds were ripe for rebellion. All Virginia was shouting "Bacon, Bacon." There was no resisting the current. Booted and armed with good broadswords and "fusils," they turned out from lowland manor-house and highland log cabin, from plantation and from hundred, and many hundreds of "well-armed housekeepers" headed by Bacon rode to Jamestown.

It was a sultry summer day—July 3, 1676—at about two o'clock in the afternoon, when the young patriot arrived at the capital. His horsemen bivouacked around the little cluster of houses forming the village, and their general went at once to work. Virginia was in flagrant revolution.

Bacon's drums and trumpets brought Berkeley upon the scene. With all his faults he was no coward. Arrayed as if going to a ball, the fiery old cavalier rushed out upon the green, and walking straight toward Bacon, tore open the lace upon his bosom. "Here! shoot me," he cried wrathfully. "Fore God a fair mark. Shoot."

But Bacon was not there to shoot anybody, but simply to demand his rights.



**Making Use of Corn-Husks**

**T**IME was when large quantities of corn-husks were utilized for home-made mattresses, but of late years they have been relegated to the background, and now one seldom bothers to save the husks, or thinks of other uses to which they may be put.

It remained for one bright, energetic young woman whose Southern mammy had taught her some corn-husk secrets when a child, to make good use of this knowledge from a commercial standpoint, and since that time many an hour has been whiled away in pleasurable work with this seemingly worthless material, and her "fad," as she calls it, has become a very popular one among a host of others.

Until one gives attention to the subject they seldom realize what beautiful shades are to be found in corn-husks, but if one begins to collect early in the fall a great variety of hues may be had before the winter evenings open up such ample opportunities for creating attractive articles with them. There are lovely cream and tan colors, rich browns and russets, and reddish purples, with all their varying shades, and it is a wise plan to save every possible tint because of their more abundant decorative possibilities.

When one has a goodly collection a small outlay for raffia and manila hemp will complete the expense account. Indeed, even the hemp may be dispensed with, if, along with the husks, one has saved and dried grasses, sedge, cat-tail leaves and the like. The summer and fall months give one every opportunity for gathering any of these, and every delightful walk or drive may add its quota to the store.

The raffia is utilized for stitching, and should be threaded into a tapestry needle, after being moistened a trifle. The hemp or tough grasses furnish the basis about which the corn-husks are coiled, and the possibilities from them consist of baskets, big and little, porch or lawn cushions, chair seats, picture-frames, mats, hats, and anything which may be made after the manner of basketry.

The first few coils for the bottom of a baskets are usually of the hemp or grasses alone to avoid bulkiness at the start. They are sewed in place with the raffia; after this the foundation material is wrapped with corn-husks, and the work proceeds as in ordinary basket-making. The colors may be arranged very artistically with but the natural shades, but when desirable these may be colored. No coloring, however, improves upon the lovely shades and silky texture with which nature has blessed the husks themselves. This work is so simple and speedy that it forms one of the most charming pastimes for summer afternoons or the long evenings of winter, and opens the way for manufacturing dainty gifts as well as ornamental and serviceable articles for the home.

For a summer cottage nothing is more pleasing or durable than a plentiful supply of corn-husk mats and seats. Even table tops, improvised from boxes or rough boards, may be covered with squares of the woven husks, and add to the furnishings of the summer cabin or tent, and one need not fear the results of a shower or the effects of a heavy dew.

MAE Y. MAHAFFY.

**Raffia Work-Bag**

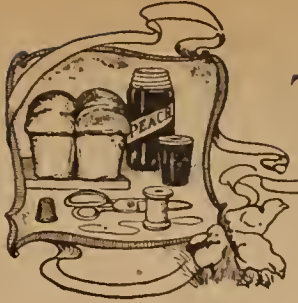
**A** WORD about the material used in this bag might be of interest here. Its popularity seems to be on the increase for fancy articles, as well as basketry.

Raffia is the outer cuticle of a palm found in Madagascar, resembling very much a dry, coarse grass of a pale yellow or tan color, very soft and pliable. It can be purchased dyed in bright colors, such as the Indians put in their baskets. In its natural color it is used by florists for packing flowers for shipment. For commercial purposes it is put up in pound bundles and sold for twenty-five cents.

The foundation for raffia work is a reed of rattan, a specie of palm which grows in the forests of India twining about the trees, and hanging in graceful festoons from the branches, sometimes to the length of five hundred feet, it is said, though seldom over an inch in diameter.

It comes to us stripped of its leaves and bark, and split into round or flat strips of various sizes, which are numbered by the manufacturer from 1 up to 15—No. 1 being the finest as well as the most costly. It can be bought in five-pound lots at basket factories, or at kindergarten supply houses.

For the bottom of the bag illustrated a mat five inches in diameter is made with a yard-length reed of No. 2 rattan. Soak in water until pliable. The end is then coiled into the smallest possible ring, and a needleful of raffia is started, with the end toward the right, in the center of the ring, and sewed over and over from left to right with the bodkin. The next coil is brought around at a little distance (about the width of the reed) from the first one, and when a fourth of the second row of coiling has been made, the raffia



**The Housewife**



is brought down through the center, up and round once again, thus holding the first coil to the second by a joining, which is made more secure by binding it twice around with the raffia in the opposite direction to the way it is wound around the rattan. When the coil has been brought half-way around the second time another of these joinings is made. There is another one when three fourths of the row has been coiled, and still another at the beginning of the third row of coiling. The next joining should be just to the right of the first one, and from that on each row is joined to the next at the right of the

the circle inside the points of the raffia mat. Attach the two bottoms together here and there with a thread of silk the shade of the silk, and also tack the points upon the silk bag, using two strands of the raffia for the draw-strings, and you have a strong, attractive work-bag. The silk bag should be one third of a yard deep when finished.

HEISTER B.ELLIOTT.

**Medallions**

**T**HE good dresser is always on the lookout for pretty and tasty medallion decorations. The two shown on this page, together with minute detail for their making, will be found useful and beautifully ornamental.

No. 1—Chain 8 to form a ring.

First row—Make 24 dc under ring, join.

Second row—Ch 2 for a tr, then make a tr in next dc of previous row, \* ch 6, catch back in 5th st to form a picot, ch 1, miss 1 dc then work a tr in each of the two next dc; repeat from \* until there are 8 double tr and 8 picots in ring; join on top of ch 2.

Third row—Ch 3 for a long tr; now make a long tr (thread over hook twice) on next tr of preceding row, \* ch 7, miss a picot, then 2 long tr on next 2 tr; repeat from \* around, join in top of ch 3.

Fourth row—Make a dc in every st of row.

Fifth row—Make 4 dc in 4 st; this will bring you to the center of the section. Now ch 5, for a picot fasten this ch with a sc in top of last dc made. Make 9 dc in 9 st, which brings you to center of next section. So continue until you have 8 picots in this row.

Sixth row—Slip back 2 st, ch 2 for a tr, then work 6 tr in 6 st; the third and fourth tr must be in a straight line with the 2 long tr in third row; \* ch 9, miss a picot and make 6 tr in 6 st, the third and fourth tr to be over the 2 long tr as before; repeat from \* around.

Seventh row—Make 4 tr over the 6 tr of preceding row, ch 6, a tr in center of ch 9, ch 6; repeat.

Eighth row—Make 12 tr under ch 6, then a tr on the tr of previous row, 12 tr under next ch 6, 1 dc between the second and third tr of the 4 tr in preceding row; repeat.

This completes one medallion. Join second medallion to first one while working the center tr of two scallops. Wrought with fine linen thread, these medallions are exceptionally effective as an edge finish on table linen. Apply them to the cloth by first basting them securely to position on the right side of the material, with their centers on a line with the edge of the cloth (no hem); the upper half is then buttonholed down and the linen cut away from the back.

No. 2—This medallion is worked in crochet silk. The center ring is made first thus: Wind No. 8 cotton thread 12 times around the forefinger, cut and tie on the



RAFFIA WORK-BAG

joinings on the previous row. Thus these joinings form a symmetrical pattern. As the coils grow larger the number of joinings must be increased to keep the work firm. This is done by putting one between each of the other joinings. New needlefuls of raffia are always started at a joining. The needle brings the end of the old strand from left to right through the upper part of the joining, leaving the end lying along under side of the rattan. The new needleful is then brought from right to left through two twists of the raffia and drawn up so as to leave a short end lying along the rattan; the winding then begins again and soon covers both ends. When eight coils have been made around the center coil, cut off the reed, if any remain, and neatly join. Knot a strand of raffia into each of the spaces by doubling it and putting the ends through the loop over the reed and drawing it up close and tight. There should be thirty



MEDALLIONS

of these double strands. Beginning with the inner one of the two strands nearest the workman, it is knotted at about an inch from the first row of knots, with the strand nearest it in the next pair, making an even mesh. This is continued around the mat, and a second row is made. Now divide into five sections, six strands in each, by knotting first the two loose strands at the top together, then the two pairs following, and so on until the bottom is reached; the work will tend to a V shape. The small ends left are sewed in a loop for a finish around the points.

Make a bag of turquoise blue or cardinal silk, with a round bottom the size of

silk, wind around once more, then crochet 32 dc over this ring, join first and last stitches, work another round of 32 dc in the 32 of first round, join; leave a few inches of silk and cut. Thread a needle with the silk end and make two twisted bars across the center of ring, as shown. Make two or three buttonhole stitches where bars cross, twist the remaining half bar and fasten off. Make outer rings like first round of center ring, join first and last stitch; now make a dc in next stitch, a tr in next, a long tr (thread over hook twice) in next, ch 5 fasten with a sc in top of long tr, make a long tr in next stitch, a tr in next, a dc in next, leave

about ten inches of silk, thread a needle with it and work nine buttonhole stitches around the inside of ring; next run the needle under each of the nine loops, to give a twist to the circle, draw up, fasten, then with the end of silk that is left this ring can be joined to next one. First fasten outer rings to center. Fasten one stitch of outer ring to two of center, leave two stitches of center ring between the fastenings. These medallions make a handsome trimming for dresses, wraps, etc. A smaller pattern may be had by winding the thread over the little finger, then the buttonhole stitches in the rings may be omitted.

MRS. J. R. MACKINTOSH.

**Tried Recipes for Pies**

**CONTINENTAL PIE**—One cupful of molasses, one cupful of boiling water, one teaspoonful of soda, three cupfuls of flour, three fourths of a cupful of lard, three fourths of a cupful of sugar. Mix well together and stir most of crumbs in and put rest over top; this for three pies.

**CENTENNIAL PIE**—First part: One cupful of molasses, one teaspoonful of soda, one cupful of boiling water.

Second part: One cupful of shortening, one cupful of sugar, three cupfuls of flour. Rub together and fill in first part.

**CHOCOLATE PIE**—One half cupful of sugar, yolks of two eggs; add one half cupful of milk, one heaping tablespoonful of corn-starch or flour, mixed in a little milk. Boil one half cupful of grated chocolate in a little milk, and stir in other parts, whites of two eggs beaten up with a tablespoonful of sugar.

**LEMON PIE**—Pulp and grated rind of one lemon, two eggs, one cupful of thick milk, one even tablespoonful of flour, one teaspoonful of butter, sugar according to taste. Bake with two crusts. This makes one pie.

**LEMON PIE WITH TOP CRUST**—One lemon, two cupfuls of sugar, two cupfuls of hot water, one half cupful of baking molasses, two eggs, one and one half tablespoonfuls of flour. Mix flour in cold water.

**ORANGE PIE**—One orange, two cupfuls of sugar, two cupfuls of sweet milk, one tablespoonful of flour, yolks of six eggs. Beat the whites of the eggs to a stiff froth with six tablespoonfuls of sugar. Put on pie after baked, put in oven to brown.

**OYSTER PIE**—Take one quart of good oysters, drain off the liquor, line a deep bake-pan with puff paste. Put in the oysters and add a teacupful of sweet milk and butter the size of an egg. Cut in small pieces and place evenly over the oysters. Add salt and pepper to taste. Cover with top crust and bake in a moderate oven thirty minutes. Serve with hot broth made from the liquor, to which add one cupful of sweet milk and one of boiling water with salt, butter and pepper to taste.

**CHOCOLATE PIE**—For one pie take one half of a cupful of sugar, two eggs, one half of a cupful of milk, one heaping tablespoonful of chocolate, one heaping teaspoonful of corn-starch. Beat the sugar and yolks of eggs together, add chocolate, boiled in part of the milk, then the corn-starch dissolved in one half cupful of milk. Bake until thick, then spread over the top the whites of the eggs beaten, mixed with a tablespoonful of sugar and a little vanilla, then brown in the oven.

**CREAM PIE**—One cupful of sugar, three eggs, one and one half cupfuls of flour, one teaspoonful of cream of tartar, one and one half teaspoonfuls of soda. Dissolve both in one tablespoonful of milk. Bake in pie tins and cut through center to make an upper and lower crust.

Cream part: Two eggs, one cupful of sugar, two and one half cupfuls of milk, two tablespoonfuls of corn-starch, piece of butter size of an egg, a little vanilla.

**CREAM PIE**—Wet three fourths of a cupful of flour in one pint of milk, stirring smooth and cooking until it thickens. Add the well-beaten yolks of two eggs, one half cupful of sugar and a little grated nutmeg to flavor. Bake the crust, pour in the above mixture. Beat the whites of the eggs to a stiff froth with two tablespoonfuls of sugar. Spread over the tops of pies and let bake a golden brown.

**The Amateur Hostess**

**Y**OUNG housekeepers or those inexperienced in the art of entertaining should go about it in a small way at first, gaining confidence, as it were, with each attempt. A pleasant way is to invite three or four women to spend the afternoon, each bringing her work. A very enjoyable time can be had with congenial friends, exchanging ideas on domestic science, literature, etc. The hostess can serve tea, wafers and cake or bonbons, which are all that is desirable, and when served in a dainty way leave a refreshed feeling within, while it goes a long way toward keeping one from being overwhelmed with obligations.

J. B.



**A** CENTURY ago Zebulon Montgomery Pike, beholding for the first time the lofty peak that was destined to bear his name, said that no human being would ever ascend its summit. Yet at the forthcoming Centennial exercises at Colorado Springs thousands and thousands of passengers will be carried to its top, and many automobiles will make the ascent in honor of the event. Colorado is bending every effort to make the Pike's Peak celebration, which will last for one week, beginning September 24, 1906, the biggest memorial event ever held in the state, if not in the West.



## Pike's Peak Centennial



LIEUT. Z. M. PIKE, FOR WHOM THE GREAT PEAK IS NAMED

The government will send 10,000 regular troops to take part in the program, in addition to representatives of the various tribes of Indians with which Pike came in contact on his toilsome march of dis-

cises will be held. Monday will be devoted to the military and veterans; Tuesday will be Pioneer Day, with a reproduction of the "Pike's Peak or Bust" days. Wednesday is to be Historical Day. Thursday "Pike Day," and Friday Colorado Day. Saturday, the close of the celebration, has been named Centennial Day. The auto form of the celebration will be an endurance run of twelve hours to a height of three miles. This feature of the exercises will be followed with great interest by the thousands of autoists who will attend. Secretary Taft, mindful of the fact that Pike was in the United States Army when he discovered the peak, has promised 10,000 soldiers, who will execute a sham battle. It will be the first occasion when all three branches of the army—infantry, artillery and cavalry—have been maneuvered together. Nor has it ever happened that maneuvers have been held in the mountains.

The name "Pike's Peak" was never officially sanctioned by the government, but was informally adopted after the early settlers had refused to designate the mountain as James' peak, the title first conferred by the war department. The early maps never alluded to the sentinel of the Rockies as Pike's Peak, and it was not until years after that the government finally followed the lead of the trappers and accepted the name, Pike's Peak.

Zebulon Montgomery Pike, discoverer of the peak, was born January 5, 1779, at Lambertton, New Jersey. He was a son

of General Zebulon Pike of Revolutionary fame, the family first settling in America in 1665. When only twenty-five years of age, Pike was chosen to head an exploring

party through the Rocky Mountain region, then the territory of Louisiana. He first sighted the Peak on November 15, 1806, and on November 27th reached its base. He did not attempt to climb to the summit, declaring that the monster mountain could not be ascended by a human being. Now there is a steam railroad running to the summit, where the United States has established an observatory. The famous young soldier-explorer was killed April 27, 1813, in an attack on York (now Toronto), Canada. Although but thirty-four years old, he was a brigadier-general, and was in command of the attacking



UNITED STATES OBSERVATORY ON THE SUMMIT OF THE PEAK



VIEW FROM THE PLAINS, SHOWING THE CITY OF COLORADO SPRINGS IN THE VALLEY, AND GIVING A STRIKING IDEA OF THE GREAT ELEVATION OF THE MOUNTAINS AND PEAK

covery. The celebration will be of a military and civic character. It will include a sham battle and maneuvers by the troops, and the unveiling of a huge granite monument to Pike.

Besides the troops, the Indians, the National Guards, the cadets, the veterans, cowboys, pioneers, patriotic societies, fraternal societies, educational institutions, historical societies, school-children and citizens generally will take part. There will be parades, tournaments of polo and golf, automobile endurance runs, drills, war-dances by Indians, cowboy sports and exercises of all kinds typical of the "Wild West."

No celebration of similar magnitude has ever been attempted in the state. It will mark the centennial anniversary of the advent of the first representative American citizen in the Pike's Peak region, since become famous for its scenery, gold, cattle and agriculture.

The anniversary celebration has assumed national proportions. It is under the management of the Zebulon Montgomery Pike Monument Association, whose membership is not confined to Colorado Springs, but includes Americans in all parts of the world. The plan of the celebration was conceived ten years ago, when the Association was formed.

The program is arranged as an allegorical history of the past one hundred years in Colorado. The opening day is September 23, Sunday, and memorial exer-

party, which was victorious over the British. His remains were interred with military honors at Madison Barracks, New York, where they still lie.

One of the few monuments in honor of the soldier-explorer is a statue of heroic size in front of the Antlers Hotel, in Colorado Springs. It was unveiled during the quarto-centennial celebration of the state, held in that city in 1901.

The monument to be unveiled during the coming centennial celebration is a huge granite mass in its native ruggedness, taken from the Peak which bears the name of its discoverer.

Pike's map shows that he climbed to an altitude of about 9,000 feet on what is now known as Mount Cheyenne, and the people of Colorado Springs propose to mark the spot by a granite boulder twelve feet high and approximately four feet square, a monument typical of the rugged character of the explorer and of the ground he traveled. The boulder was found near the spot where Pike and his companions found shelter from the snow-storm, and it pleases the sentimental to imagine that it is not beyond the range of probability that the brave pioneer actually saw and may have touched his own monument, erected by an admiring people one hundred years after his terrible experience. This gigantic boulder will be set upon a pedestal four feet high, and four bronze tablets with suitable inscriptions will be riveted to its sides.



THE PEAK FROM PIKE'S PEAK AVENUE, COLORADO SPRINGS, SHOWING STATUE OF PIKE IN FRONT OF THE ANTLER'S HOTEL



"I AM going to celebrate. The fact that I am far from home makes only a stronger reason for my doing so. Who ever heard of an American failing to commemorate the great and glorious Fourth! If these barbarians don't know what a Fourth is, I'll show them."

So soliloquized Jack Wallace, the United States consul at Dora, as he sat lounging in the little portico of his cottage. Before him lay the blue waters of the Mediterranean Sea, and at his back towered in majestic magnificence the giant mountains.

The consul was young. Dora was dull; insufferably dull, and he hailed the coming holiday as a break in the monotony of his life with as much pleasurable anticipation as any schoolboy at home might have done.

Old Lul, his native servant, was approached in regard to the matter of preparing fireworks, but shook his head when the matter was explained to him. There were no fireworks to be obtained nearer than Jaffa, he said. It was now the second of July, and would be impossible to get any to little out-of-the-way Dora in time.

"Then I'll make some," announced Jack, conclusively.

The idea was no sooner conceived than put into execution. Black gunpowder there was to be had in plenty. Brown paper and paste were soon forthcoming, and from these materials it did not take the consul long to manufacture a large collection of formidable-looking pieces. They might not have been finished with that neatness which we are accustomed to see, but the explosive power was there beyond doubt.

That evening Jack Wallace rested from his labors and surveyed his handiwork.

"They are great!" he pronounced, as he settled himself in his favorite chair on the portico to enjoy with gusto his evening cigar.

A few columns of distant smoke out on the ocean attracted his instant and keen attention.

"Lul, my glasses!" he shouted to his native servant.

The servant came running with them, and raising them to his eyes, Jack peered through them.

"Two, four, six, eight, ten, twelve, fourteen of them," he counted. "Must be the British fleet; I heard their Mediterranean squadron was on its way to Alexandria. Whew! what a crowd of them. I wish I could see 'Old Glory' in these waters sometimes; never mind, the Union Jack of old England is about the next best thing to it, I suppose."

The smoke faded away; he put down the glasses, and sat for some time meditating. He watched the queer-looking natives ambling by. They were all sorts and conditions, from the unobtrusive little Jews, with their turbaned heads and long, flowing beards, to the tall, warlike Kurds, with their martial bearing and murderous-looking guns. With a discontented sigh, he turned indoors and impatiently flung away his cigar.

The Fourth of July broke hot and cloudless. Jack Wallace was early astir, and attending to what little official business there was to be done. Then, arrayed in a spotless white suit, he lay in the hammock, which hung suspended from a couple of big fig trees, and lazily watched the smoke ascend from his cigar.

A miscellaneous supply of fireworks was within his reach, and at times he leaned over, and lighting a cracker from the end of his cigar, flung it clear, and watched its explosion with patriotic boyish glee.

In honor of the day, the consul had caused the "Stars and Stripes" to be hoisted, not only from its usual position on the roof of the consulate, but on either side of the little wicket gate that marked the entrance to the garden; and he watched with admiring pride as the gentle breeze blew free the rich folds of the dear old flag, which meant so much more to him now that he was an exile, than it did when he dwelt in "God's country."

Soon after the noon-hour he commenced placing his large set pieces, and arranging his program for the evening. He had invited Herr Grossenbeck, the German consul, to share his entertainment, but the previous day the representative of the kaiser had suffered a slight sunstroke, which made it unwise for him to venture out. So Jack Wallace had his celebration all to himself, unless Lul and the bull-terrier, "Snuff," were counted.

At sunset he started the display with a sky-rocket, which was despatched on its

journey from the neck of an old champagne bottle. For a homemade rocket it was a great success. Then followed roman candles, wheels, devil-chasers and crackers, in rapid succession.

Soon a little crowd collected outside the consulate, and with spectators to admire his handiwork, Jack's enjoyment increased. He ignited some colored fires, amid many "O-hs!" from the natives. Then came a jack-in-the-box, more sky-rockets, and a monstrous devil-chaser.

Now if that giant chaser had not been set off, the night would have passed without trouble; but it was set off, and trouble immediately followed.

Everyone knows the erratic and uncertain course which these fiends take, but surely never was there a chaser that more justified its name than this one. To begin with, it was of extraordinary size. The consul was hampered by no police regulations regarding the size and power of his fireworks, and the result was that they were as large and explosive as his supply of powder and materials would allow.



"See what I do with your dirty rag!"

No sooner had that giant chaser felt its power, than things began to hum. It made a terrific drive for the crowd of spectators in front of the consulate. In a second it was amongst them, fizzing and sputtering, cracking and jumping. It seemed to become suddenly possessed of almost human intelligence, and singled out for its victim a tall, dignified-looking Kurd. In vain he sought to escape from it; it followed him with the persistency of a Bombay beggar. Howling, kicking, shrieking and swearing, the man danced madly around, leaping high in the air, in his efforts to get away from his tormentor, while Jack Wallace, overcome by the ridiculousness of the situation, sat down and roared with laughter.

There was an accounting coming, however. In a few moments the chaser had spent itself, and lay passive. Then the crowd gathered anew, with angry gestures.

The tall Kurd, ashamed of his fright, and resentful against the cause of it, forced his way toward the consul. He shook his fist in Jack's face; his countenance livid with passion.

"Pig of a Yankee!" he cried. "I spit on you!—see!" and he spat full in Jack's face.

The fists of the young American clenched, and for a second it seemed as if he would close with his insulter, and wipe out the debt at once. A year ago he would have done so without further thought. Now, he recollected that he held an official position and must curb his wrath. He drew a handkerchief and wiped his face.

"Get out of here!" he said, quietly.

Something in the pale face and determined tones of the white man made the trespasser retreat, muttering as he went: "Dog of a Christian!"

He had reached the gate, and was just about to mix again with the crowd on the street, when his eye was attracted by the "Stars and Stripes," which floated there. All at once his passion blazed out again.

"See what I do with your dirty rag!" he

trampled under foot, and Jack Wallace was borne half stunned and bleeding to the ground. They seized the flag from off his shoulder, and tearing, spitting, cursing upon it, they trampled it again in the dust. The one on the further gate-post was about to suffer a like fate. It was ripped loose from the staff, and the crazy crowd was already tearing it to bits, when there was a sudden diversion.

"Oh, I say, you know, I won't stand that!" roared a voice. It was an angry voice, and almost accompanying it, there came the sharp crack of a revolver, and one of the ruffians fell, with a sharp cry of pain.

"Give me that flag!" demanded the newcomer, forcing his way through the astonished crowd.

But that was the one thing which the rioters had no intention of doing without serious trouble.

"Give it up; confound you! Do you hear!" and he attempted to seize it.

A blow from the butt-end of a gun drove him back, but Jack was on his feet again by this time, and recognizing the intruder as a friend, dashed to his assistance. He still held the stump of the broken picket in his hand, but the stranger had a better weapon than that. He had drawn a formidable-looking, gleaming sword, and was making excellent practice with it.

"Take this!" he shouted, as he thrust a big revolver into Jack's hand. The consul noticed that his rescuer wore a naval uniform. Next moment he was fighting for his life.

It was a desperate game, with long odds against the two white men, but suddenly out on the heavy night air three shrill whistles sounded, and then a cheery bugle note.

"Halt! Fix bayonets!" came a sharp command.

There was a dull thud of guns being brought to the ground, and then a rattle of side-arms.

"Charge 'em!" sounded the same voice, and next moment Jack Wallace found himself surrounded by a score or more of blue-jackets with wide-brimmed straw hats.

That was enough for the crowd. With a yell of terror, they turned tail and fled, the sailors in hot pursuit close behind.

Jack Wallace turned to look at his rescuer.

The latter advanced with outstretched hand.

"I am Lieutenant Martin, of H. M. S. 'Alert,'" he said.

"Pleased to meet you, sir. I am John Wallace, United States Consul here. Allow me to thank you for your very timely assistance."

"Not at all; it was the bluejackets pulled us both through," said the British officer, smiling. "They arrived in the nick of time. Let us recover the flag."

The two men commenced to pick up the tattered bits of "Old Glory," and when the squad of sailors returned, the gunner in charge of them found his lieutenant and Uncle Sam's representative engaged in piecing together the precious bunting, like a couple of children solving a puzzle.

"It's all here!" announced the lieutenant, triumphantly. "Now I'll take it down to our sailmaker and get him to sew it up. It will look jolly well patched up, but it will do to hoist again all right."

Arm in arm, the two turned and went into the consulate, while Snuff picked himself up from somewhere, and Lul suddenly appeared on the scene again.

"It was jolly lucky we put in here," said the Britisher. "We came for despatches which our admiral was expecting, and your fireworks first attracted me up here. I thought you must be celebrating Guy Fawkes' day, prematurely."

"No," said Jack, smiling, "it's the Fourth."

"What day is that?"

"Why, Independence Day, of course."

"Oh! Ah!" commented the British officer, and the subject was dropped and forgotten over a bottle of "extra dry," in Jack's cozy smoking-room.

"To the Union Jack and all the men who serve under it!" announced the consul rising.

"To the Stars and Stripes, and all the consuls beneath it," responded the lieutenant.

Glasses clinked, and once more blood had been proven thicker than water.

naked brown leg felt the terrier's teeth that night.

It was only a short respite, though. How could one man and a dog hold off a couple of hundred maddened fanatics! They swarmed upon him again. The picket was broken short off; Snuff was



## Patriotic Entertainment

**T**HE firecracker continues to hold its place of importance in the celebration of Independence Day, although each year the laws with regard to the sale and use of fireworks seem to become more stringent, and yet the usual number of injuries are reported each year.

Everybody celebrates, however, in one way or another. A subscriber has written for suggestions for home entertainment upon this day. For inexpensiveness and simplicity, the "United States party" comes pretty near being the thing. The fun of the United States party consists in seeing which members of the company are best "up" in matters concerning their native land. A good way is to divide a party into two groups, the object of each being to defeat the other by answering the most questions correctly.

For the first contest secure at the stationer's two blank cards: Decorate these at home with a border of tricolor. On each one write these two questions:

"Which were the thirteen original states?"

"By what person or company was each founded?"

Give one card to each division of the company. The opponents at once withdraw into opposite corners and talk the queries over. Twenty minutes are allowed in which to discover the answers. The division answering the most questions correctly has one point toward the final prizes set down to its account.

**OUR PRESIDENTS**—A contest built upon "our presidents" is next announced. For this strips of white paper are passed, giving the following initials: G. W., J. A., T. J., J. M., J. Q. A., M. V. B., W. H. H., J. T., J. K. P., Z. T., M. F., F. P., J. B., A. L., A. J., U. S. G., R. B. H., J. A. G., C. A. A., G. C., B. H., W. McK., T. R.

The players are asked to substitute for each set of letters the full name of one of the presidents of the republic. The division which proves itself most erudite receives a point toward the prizes to be given at the end.

The contestants are advised to give, so far as they are able, the full name—that is, Christian name and surname—of each chief executive; as, in the event of all the surnames being correctly given by both parties, the fullest list of Christian names will win the point in this contest.

**T**HE nicknames of states given to be guessed affords another lively bout. The following questions written upon slips of paper and passed to each division give the nucleus of this trial of skill: What state is known as the Badger State? Wisconsin. The Bay State? Massachusetts. The Bayou State? Mississippi. The Bear State? Arkansas. The Creole State? Louisiana. The Diamond State? Delaware. The Empire State? New York. The Excelsior State? New York. The Freestone State? Connecticut. The Granite State? New Hampshire. The Green Mountain State? Vermont. The Hawk-eye State? Iowa. The Hoosier State? Indiana. The Keystone State? Pennsylvania. The Lake State? Michigan. The Lone Star State? Texas. The Lumber State? Maine. The Nutmeg State? Connecticut. The Old Dominion State? Virginia. The Old North State? North Carolina. The Palmetto State? South Carolina. The Peninsula State? Florida. The Prairie State? Illinois.

The workers will probably require half an hour for puzzling out these nicknames.

America has her twelve wonders as well as the countries of greater antiquity. How many Americans can give these as readily as they can name the remarkable things to be seen in Europe? The next number on the program goes to decide this question. Each side is asked to name the twelve most wonderful things of North America, and to the side showing best judgment the coveted "point" is awarded.

**I**T WOULD be well for the hostess to prepare in advance a list of the twelve most wonderful things to be used as reference. For while no list can be incontestably correct, a standard in playing the game will be necessary. Among the "wonders" the following would probably be reckoned most notable: Niagara Falls, Mammoth Cave, Yosemite Valley, Lake Superior, Brooklyn Bridge, Fairmount Park (Philadelphia), Capitol at Washington, Luray Cave, Natural Bridge over Cedar Creek (Virginia), Washington Monument, Central Park, and the Missouri River.

When the "wonder" papers have been examined and the winners promoted, players are promptly confronted with an interesting question-paper on the fictitious names of cities. The questions used are these: What city is called the City of Magnificent Distances? Washington, D. C. City of Brotherly Love? Philadelphia. City of Churches? Brooklyn. City of

## The Young People



Elms? New Haven. The Hub? Boston. City of Rocks? Nashville (Tennessee). City of Spindles? Lowell (Massachusetts). City of Straits? Detroit. Crescent City? New Orleans. Empire City? New York. Fall City? Louisville. Flour City? Rochester. Flower City? Springfield (Illinois). Forest City? Cleveland. Garden City? Chicago. Gate City? Keokuk (Iowa). Gotham? New York. Iron City? Pittsburgh. Monumental City? Baltimore. Mound City? St. Louis. Quaker City? Philadelphia. Queen City? Cincinnati. City of the Lakes? Buffalo. Railroad City? Indianapolis. Smoky City? Pittsburg.

With this contest the mental Olympian games come to an end and the papers are examined. The points won throughout the series are then counted. The corps winning the most points draw among themselves for the prize.

Red, white and blue are capable of such effective grouping that the patriotic table ought to be particularly attractive.

## A STARS-AND-STRIPES AFFAIR

**Y**OU may make your Fourth-of-July party a Stars-and-Stripes affair. It will come off with the dash and swing of the

gay music from which it takes its name, and with the éclat so necessary for our immortal Independence Day.

The Stars-and-Stripes game on which the entertainment is built can be played by young or old, erudite or ignorant, and by any number from fifteen to forty.

The only things needed are several boxes of blank cards, *carte de visite* size. The number of these cards required will depend upon the number of players.

Take a large number of the cards and paste a gilt star on each. On another bunch paste narrow stripes of red, one stripe on each. On the remaining lot paste corresponding stripes in silver. This silver represents the white stripes of our flag, which would not show up clearly upon a white card.

The players are seated around a large table, and the cards are dealt like an ordinary pack, giving one each round to each player and one to the pool until the number is exhausted.

The cards are held figure-side in. Each player, after taking the cards in hand, examines them to see if among what he holds he can make up a "flag;" that is, if he holds as many stripes of each kind and as many stars as there are stars and stripes in the American flag.

If he holds the correct number he separates these cards from the others in his hand, shows them to the table, and then lays them aside. If the cards dealt to him contain two flags he shows both to the table and pockets both.

**W**HEN no player can form further flags from the cards in hand the drawing begins. Each player borrows from his left-hand neighbor, and endeavors, by borrowing, to make a flag. If any player gets out of cards he still has the privilege of drawing. The person on the right of a person out of cards draws from the pool. The pool is drawn upon in this predicament only.

The ignorance which too many Americans are guilty of with regard to their country's emblem cannot fail to come to light in the Stars-and-Stripes game, and is provocative of much amusement, for no one is allowed during the progress of the game to answer any questions or give any information with regard to the formation of the flag.

Play, of course, goes on rapidly—drawing, matching and laying up. There is plenty of time between the drawing and being drawn from to determine whether or not one has the elements of a flag in one's hand.

A certain time, say one hour or one hour and a half, in which to make flags should be announced in advance. The player who at the end of that time has formed the most banners carries off the prize. The prize should be reflective in some way of the nature of the evening.



THE DAY THE WHOLE FAMILY CELEBRATES



The Cow-Puncher's Elegy

I've ridden nigh a thousand leagues upon  
two bands of steel,  
And it takes a grizzled Westerner to know  
just how I feel;  
The ranches dot the strongholds of the  
old-time saddle men,  
And the glory of the cattle days can ne'er  
come back again.

Oh, the creak of saddle leather—  
Oh, the sting of upland weather,  
When the cowmen roamed the foothills  
and drove in ten thousand steers;  
Through the years, back in the dream-  
ing,

I can see the camp-fires gleaming,  
And the lowing of the night herd sounds,  
all faintly, in my ears.

There's a checkerboard of fences, on the  
vast and wind-swept range,  
And the haystacks and the windmills make  
the landscape new and strange;  
And the plains are full of farmers, with  
their harrows and their plows;  
On the roadside loiter kidlets who are  
"driving home the cows!"

Oh, the quickly faded glory  
Of the cowboy's brief, brief story!  
How the old range beckons vainly in the  
sunshine and the rain.

Oh, the reek of round-up battle,  
And the thund'ring hoofs of cattle—  
But why dream a useless day-dream that  
can only give one pain?

Where have gone those trails historic,  
where the herders sought the mart?  
Where have gone the saucy cow-towns,  
where the gun man played his part?  
Where has gone the Cattle Kingdom, with  
its armed, heroic strife—  
Each has vanished like a bubble that has  
lived its little life.

Oh, the spurs we set a-jingling,  
And the blood that went a-tingling  
When we rode forth in the morning, chaps-  
clad knights in cavalcade;

And the mem'ries that come trooping,  
And the spirits, sad and drooping,  
When the cowman looks about him at the  
havoc Time has made.

—Denver Republican.

Bachelor Girls Farming

THE New York "Sun" tells of two  
bachelor girls and their mother  
who have started an experiment this  
summer to see if they can actually  
live from the proceeds of two acres of  
land.

The land is situated on one of the  
Berkshire hilltops, near the village of  
Terryville, not far from Waterbury, Con-  
necticut. Last summer was the first they  
spent there, and they sold \$50 worth of  
garden truck, besides supplying their own  
table.

This spring they started early. They  
have plowed and planted the whole two  
acres, half of it to potatoes. They expect  
to raise 500 bushels of potatoes, to sell  
them for \$1 a bushel, and to clear \$250  
or \$300 from that acre. They are now  
selling hot-bed radishes and lettuce, and  
have sold 1,000 tomato plants raised under  
cheese-cloth from seeds planted in April.

The other acre will include a big veg-  
etable garden, a strawberry bed and a  
scrap of pasture for the horse. Eventual-  
ly they will have a greenhouse. They  
keep hens enough to supply their own  
table. They hired a man to do the plow-  
ing and hoe the potatoes. The rest they  
expect to do themselves.

"I believe," said one of them, "that a  
great source of modest prosperity is being  
wasted by the absence of market garden-  
ing in the neighborhood of the smaller  
places. Terryville has about 1,800 inhab-  
itants. There is one factory there.

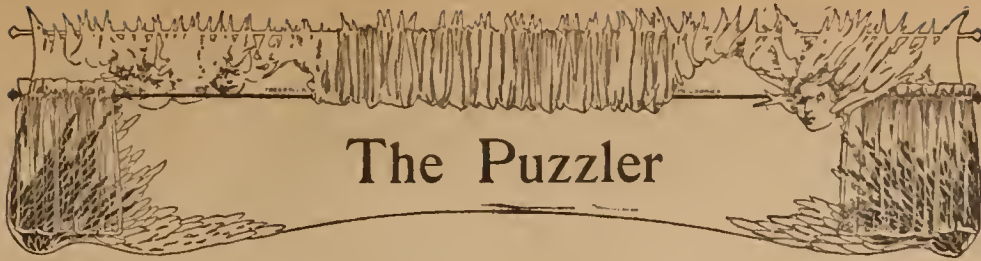
"Before that came it was a farming vil-  
lage. The farms are all there yet, but the  
farmers are all working in the factory.  
There are no vegetable gardens in that  
village, and no market gardens around it.

"They raise nothing on their farms but  
hay. They will take a vacation in the  
summer and go and do their haying, or  
they will hire a man to do it for them;  
but as they do nothing for the land the  
hay crop gets poorer every year.

"At Terryville and Waterbury all the  
garden truck comes in from New York,  
and is, of course, expensive and not fresh.  
With great stretches of uncultivated land  
all around, the people eat canned veg-  
etables. There is some market gardening  
around Hartford, but there, too, supplies  
are drawn from New York. It is so all  
through that region and other regions  
like it.

"Now, I don't blame a man who has  
always lived on a farm and farmed in the  
old-fashioned, unscientific way for want-  
ing to get into town and go to work in a  
mill. It is another stage in his evolution.  
But it leaves an opportunity for the sci-  
entific farmer, the educated farmer who  
farms with brains.

"That sort of person is one who has got  
done with cities, who has been through  
the mill, who has had enough, and longs



The Puzzler

A Rebus Story of "The Day We Celebrate." Can You Read it Correctly?



Answers to Puzzle in the June 15th Issue: Pine Tree, Maine; Lone Star, Texas; Golden, California; Buckeye, Ohio; Pan Handle, West Virginia; Keystone, Pennsylvania

to get out of the treadmill of city life. Such a person finds interest and fascina-  
tion in the life which the owner of the  
place abandoned to go to work in a woolen  
mill. I believe that all the small farming  
of the East, which is practically only  
market gardening and raising of special-  
ties, is going to pass into the hands of  
this class.

"I believe that every year will see more  
and more educated young men and women  
turning to scientific farming for a living.  
That sort of farmer will demand more  
than the old-fashioned one. Books, news-  
papers, periodicals, a bath-tub and an oc-  
casional trip to the city will be necessaries  
to him.

"He will make them possible by his bet-  
ter methods, both of cultivating and of  
marketing. He will raise high-grade spe-  
cialties—fruit, butter, mushrooms, violets  
—all sorts of things, and ship them straight  
to customers. He won't have very much  
money, but he will have as much at the  
end of the year as he had on his salary in  
the city. He will be free from the strain  
and grind of city life; he won't be afraid  
of being fired at forty, and he will be his  
own boss."

The Life Worth Living

This is the life that I would lead:  
A cottage on a grassy hill,  
A few immortal books to read,  
A woodland way to roam at will.  
A garden spot to turn with spade,  
The shelter of a maple's shade.

This is the life that suits me best:  
The daily burgeon of the East,  
The daily blossom of the West,  
The Milky Way my nightly feast,  
The blue of skies my dearest boon,  
The solace of the afternoon.

This is the life that woos and wins:  
A living far from crowd and cant,  
A home secure from raucous dins,  
A realm away from roar and rant,  
The monarch of a modest hill,  
To have and hold the world at will.

—Robertus Love.

Virtues of "Sold" Sign

"Get this parlor suit out at once, John,"  
said the manager.  
"Oh, let's just put a 'Sold' tag on it till  
to-morrow," grumbled Salesman John.  
"The men are fearful busy."

"John," said the manager, "you know  
very little about human nature if you're  
willing to leave a suit of furniture marked  
'Sold' in sight of the public. If we left the  
suit here everybody that came in would be  
attracted by the 'Sold' sign on it and  
would want to buy it or its duplicate. The  
suit can't be duplicated, as you know, and  
so the people would be dissatisfied. This  
suit, because they couldn't have it, would  
seem to them the only desirable one in our  
stock. They would take no other. We  
should probably lose half a dozen sales.

"Why, John, there are some dishonest  
dealers who put 'Sold' signs on goods that  
are a drug, so as to dispose of those goods  
quickly, and it is a fact not creditable to  
human nature that fake 'Solds' will move  
a slow stock more quickly even than fake  
reductions."—New Orleans Times-Dem-  
ocrat.

Attacked by Flying-Fish

A RECENT despatch from Honolulu tells  
of a most remarkable attack made on the  
steamer "Claudine" by flying-fish in the  
Hawaii Channel.

The search-light on the vessel evidently  
attracted and angered the fish. A large  
school of the fish suddenly rose out of  
the water and instead of flying away from  
the boat, as is usually the case with that  
variety of fish, they flew over the bow  
of the craft. One of them flew directly  
for the light and broke the glass, putting  
the light out of commission. A dozen fish  
reached the upper bridge of the vessel and  
two struck the side of the man on watch,  
nearly knocking him over.

It has been noted by island captains  
that the search-lights seem to affect the  
flying-fish in a very strange way. The  
fish evidently do not like the bright light  
cast upon the waters, for they invariably  
fly at the light, after the fashion of moths  
trying to extinguish a candle.

Weird Western River

THE "World's Work" draws attention to  
the fact that perhaps the world is less  
familiar with the Snake River of Idaho  
than any other river of importance in  
the United States, and yet it is our sev-  
enth largest river—more than 1,000 miles  
long. It is one of the most wonderful  
and impressive waterways in the world.

The few who have tried to follow its  
winding course through wild and forbid-  
ding extents of lava plateaus, do not won-  
der that so little is known of it, for no  
railroads traverse the lifeless desert that  
borders it, and no boats for hundreds of  
miles at a stretch, dare ply its waters. It  
is navigable for only one hundred miles  
from its junction with the Columbia to  
the Idaho boundary, and in several isolat-  
ed sections of the interior.

For the greater part of its course it  
flows through old and magnificent cañons  
of its own making, through desolate and  
awful wastes, the result of vomiting  
craters and of convulsions of the earth.

Her Weak Point

THE dream of suffrage had been real-  
ized. There were female police.  
After a desperate struggle one of the  
brave lady cops had arrested two porch-  
climbers single handed.

"Don't dare to resist," she hissed; "if  
you do I shall shoot."

There was an ominous click.  
"Don't shoot, lady," said one of the  
porch-climbers suavely; "we won't resist,  
but I just wanted to tell yer dat during de  
row yer hair got mussed an' yer hat ain't  
on straight."

The lady cop flushed with embarrass-  
ment.

"Gracious!" she exclaimed. "Where  
can I find a mirror? I could never think  
of going along the street like this. Wait  
here until I return."

And the porch-climbers slipped off in  
the shadows, while the lady cop went to  
find a mirror.—Chicago News.

Song of the Oregon Pine

I am a harp of a thousand strings—  
Awake to the faintest voice that sings!  
Coo of the dove to its mate in the nest  
Softly I echo with passionate zest!  
Call of the wolf to its whelps in the night,  
Weirdly I whisper with wild delight!  
Lilt of the lark in the upland lea,  
Moan of the waves on the sun-kissed sea,  
Joy of the surf on the rock-bound beach—  
These I gather and set to speech!  
Croon of the river, winding afar,  
Crash of the wave on the distant bar,  
Sigh of the magical summer night,  
Scream of the eagles' dizzy flight—  
The song that trembles over my strings  
Is the broken chords of a thousand things!  
Outward, upward my harp-strings reach,  
Bringing from Chaos the pine-tree's  
speech!

Wonder and mystery, joys and fears,  
The multiple song of a thousand years!  
—Pacific Monthly.

The Modern Puzzle

Life is a puzzle  
All sages avow,  
But never so vexing  
A problem as now.  
Since the muck rake's been busy  
And stirred such a stew  
Nobody can hardly  
Know just what to do.  
To eat you must decide on—  
You will or you won't;  
You'll die if you do  
And you'll starve if you don't.  
If you're sick disease threatens,  
In drugs dangers lie;  
If you take them you're poisoned;  
If you don't you will die.  
The air's full of microbes,  
To breathe it is death;  
And yet to be living  
You must draw your breath.  
All money is tainted;  
Your soul cannot give  
It room—without money,  
Yet how can you live?  
In water is typhoid;  
In wine ruin's brink;  
So when you are thirsty  
There's nothing to drink.  
Our grandpas and grandmas,  
Who were not so wise,  
Just ate, drank and physicked  
And lived good long lives.  
But we, with our knowledge,  
Fear from night to dawn,  
Doomed if we stand still,  
Wrecked if we move on.  
No step can we take but  
We fear we will rue;  
Alarmed if we don't,  
Scared green if we do.  
Yes, life is a puzzle,  
And bitter our cup;  
We can't guess it right,  
And we won't give it up!  
—Baltimore American.





Fashions for the Outdoor Girl



No. 765—Plastron Shirt-Waist

Pattern cut for 34, 36, 38 and 40 inch bust measures. Quantity of material required for medium size, or 36 inch bust, four and one half yards of twenty-two-inch material, or three and one half yards of thirty-inch material, with three eighths of a yard of tucking for chemisette

No. 766—Circular Skirt

Pattern cut for 24, 26, 28 and 30 inch waist measures. Length of skirt, 40 inches. Material required for medium size, or 26 inch waist, nine yards of twenty-two-inch material, or seven yards of thirty-inch material



No. 767—Princess Bathing-Suit

Pattern cut for 32, 36 and 40 inch bust measures (small, medium and large). Quantity of material required for medium size, or 36 inch bust, nine yards of twenty-two-inch material, or seven yards of thirty-inch material, with three fourths of a yard of contrasting fabric for trimming



No. 768—Tucked Tennis Shirt-Waist

Pattern cut for 32, 34, 36 and 38 inch bust measures. Quantity of material required for medium size, or 36 inch bust, four and one half yards of twenty-two-inch material, or three and one half yards of thirty-six-inch material

No. 769—Five-Gored Gathered Skirt

Pattern cut for 22, 24, 26 and 28 inch waist measures. Length of skirt, 40 inches. Quantity of material required for medium size, or 26 inch waist, nine yards of twenty-two-inch material, or seven yards of thirty-six-inch material

**H**AVE you a mental picture of just the loveliest type of girl in the whole wide world? Does she haunt you with her witchery, and do you want to see her in reality? Then let me introduce you to the summer girl of 1906. You will find her more picturesque, more piquant, more lovely in innumerable subtle ways than even your dream picture.

Though, in a way, the powers that rule the fashions are responsible for this, yet it is the girl herself who deserves most of the credit. In many ways she is following her own sweet will as far as her clothes are concerned, and in this respect experience and other summers have taught her much.

It is the lingerie effect that is the chief characteristic of her gowns and their many fascinating frills this year. Fabrics of a blow-away texture are the ones in favor, and everywhere the trail of chiffon can be discovered. Not only must every material be soft in finish and wonderfully sheer in texture, but only the finest of laces and embroideries are used. The ribbons and silks all have the chiffon finish, and even such accessories as belts and parasols come in lingerie styles.

Perhaps the vogue for blow-away frocks and frills is emphasized most clearly in the new type of shirt-waist girl. Of course, the summer wouldn't be summer without the shirt-waist girl, so she is with us again. But she has a new name this year—by those who know her best she will be called the Baby Princess Girl. She is a sort of glorified edition of the shirt-waist girl of other years. She is more picturesque and more charming in appearance. She has no need to worry her pretty head about the parting of her waist and skirt at the back, and the troubles of keeping her necktie correct in every detail. All these worries are over. The shirt-waist and skirt of the Baby Princess dress are joined. When you get into one you get into the other at the same time. The narrow belt which covers the joining



No. 762—Waist with Pointed Yoke

Pattern cut for 34, 36, 38 and 40 inch bust measures. Quantity of material required for medium size, or 36 inch bust, three yards of twenty-two-inch material, or two yards of thirty-inch material, with three eighths of a yard of lace for yoke and collar



No. 764—Lingerie Princess Dress

Pattern cut for 34, 36 and 38 inch bust measures. Quantity of material required for medium size, or 36 inch bust, four and one half yards of inserted lawn twenty inches wide for the upper part of the Princess and the sleeves, and ten yards of twenty-two-inch material for the skirt portion, with three fourths of a yard of all-over lace for the trimming

Any of the designs illustrated on this page can be easily made at home with the aid of our patterns.



No. 760—Full Waist with Empire Girdle

Pattern cut for 32, 34 and 36 inch bust measures. Quantity of material required for medium size, or 34 inch bust, four and one half yards of twenty-two-inch material, or two and three fourths yards of thirty-six-inch material, with one half yard of silk for girdle

No. 761—Three-Piece Gathered Skirt

Pattern cut for 22, 24 and 26 inch waist measures. Length of skirt in front, 42 inches. Quantity of material required for medium size, or 24 inch waist, ten yards of twenty-two-inch material, or eight yards of thirty-six-inch material

can never be lost, or not where you want it when you want it, for it is sewed to the frock. This style, Nos. 762-763, gives long lines to the figure, and the fact that there is no lower portion of the shirt-waist to wrinkle under the skirt and add to the size of the hips and abdomen has very much to do with the graceful hanging of the skirt.

The shirt-waist, No. 768, has been specially designed for the girl who goes in for outdoor sports. It is made with a soft turn-down collar which is attached to the waist. The sleeves are short, and are finished with an arm-band which is slashed at the inside seam and turned back. The model is tucked in groups. The front of the waist is cut away, and a full tucked portion inserted. The waist closes in front with buttons and buttonholes through an applied box plait.

The skirt, No. 769, is cut short enough to be comfortable for all outdoor sports. It is made in five gores and trimmed with applied bands.

PATTERNS

To assist our readers and to simplify the art of dressmaking, we will furnish patterns of any of the designs illustrated on this page for ten cents each. Send money to Pattern Dept., The Crowell Publishing Company, 11 East 24th Street, New York, and be sure to mention the number and size of the pattern desired.

Our new summer catalogue of fashionable patterns, containing two hundred of the latest designs that will be appropriate for all occasions, is now ready, and will be sent free to any address upon request.





Sunday Reading

Nothing Lost by True Courage

AN ILLUSTRATION of the spirit of the brave men who fought the battle of good government against treason will be found in the following—though this is but one of a thousand similar noble and heroic instances:

A New Hampshire regiment had been engaged in several successive battles, very bloody and very desperate, and in each engagement had been distinguishing themselves more and more; but their successes had been very dearly bought, both in men and officers. Just before "taps" the word came that the fort they had been investing was to be stormed by daybreak the next morning, and they were invited to lead the "forlorn hope." For a time the brain of the colonel fairly reeled with anxiety. The post of honor was the post of danger, but in view of all circumstances would it be right, by the acceptance of such a proposition, to involve his already decimated regiment in utter annihilation? He called his long and well-tried chaplain into council with him, and, asking what was best to be done, the chaplain advised him to let the men decide for themselves. At the colonel's request he stated to the regiment all the circumstances. Not one in twenty, probably, would be left alive after the first charge; scarcely one of the entire number would escape death, except as they would be wounded or taken prisoners. Having submitted the matter to the soldiers, the chaplain told them to "Think it over calmly and deliberately, and come back at twelve o'clock and let us know your answer." True to the appointed time they all returned. "All?" was the interrogatory. "Yes, sir, all, without exception, and all of them ready for service or for sacrifice." "Now," said the chaplain, "go to your tents and write your letters; settle all your worldly business, and whatever sins you have upon your consciences unconfessed or unforgiven, ask God to forgive them. As usual, I will go with you, and the Lord do with us as seemeth him good." The hour came, the assault was made; onward those noble spirits rushed into "the imminent deadly breach," right into the jaws of death. But, like Daniel when he was thrown into the lions' den, it pleased God that the lions' mouths should be shut. Scarcely one hour before the enemy had secretly evacuated the fort, and the "forlorn hope" entered into full possession, without the loss of a single man.

The Christian's Vocation

"I beseech you that you walk worthy of the vocation in which you are called."—Ephesians, iv., 1.

ON THE above text the Rev. John J. Donlan, writing in the Philadelphia "Press," says:

"There is no metaphor which St. Paul more frequently uses than that referring to the faithful as temples of the living God.

"Now God is everywhere present; all creation may be properly called his temple. Since the apostle particularly dignifies human creatures with this appellation we must in a more elevated sense and in a more perfect manner be his temples. The 'vessel of election' explains his meaning in his letter to the Romans. 'The charity of God is poured abroad in our hearts by the Holy Ghost who is given to us.' Hence the spirit of God adorns and beautifies our souls with an infinite variety of precious gifts and graces; and so the soul becomes a habitation in which he loves to dwell.

"Christians, therefore, should be conscious of the dignity of their vocation, and, admitted as we are in a sense to a participation of the divine nature, we should rejoice in our pre-eminence and be watchful not to descend again by depravity to original vileness. Our vocation likewise demands that God alone be worshiped and adored in our souls. All our senses and faculties must bow down before him. This exalted vocation has brought us into fellowship with Christ Jesus and has made us co-heirs with him to God's eternal presence. This is the consoling thought which supports us under pressure of human calamities. It is the only anchor on which our souls can secure rest amid the boisterous waves, the raging storms and the tempests of this mortal life.

"Where a man's treasure is, there is his heart also." If we love the things of earth, our souls are agitated and ruffled. We begin to repine at being thwarted in our inclinations, we become impatient under disappointments and are harassed by alternate hopes and fears. If we keep God's temple perfect our souls will re-

semble the heavens. The firmament is always pure and serene.

"Then will the light of faith be diffused over our souls and enable us to penetrate the hidden things of life, of God's wisdom. Then will divine hope compel us, even while on earth, to enjoy in a measure that happiness of which the plenitude is reserved for a future world. Then will heavenly charity become the ruling passion of our hearts and establish its dominion in our souls. Then will it command and impel all our powers, ennoble our views, elevate our desires and purify our natures. In this we shall recognize our vocation to be saints, as says St. Paul, and of our souls, his living temple, we shall hear the voice of the most high declaring, 'I have chosen and have sanctified this place that my name may be there forever, and my eyes and my heart may remain there perpetually.'"

A Christian Woman in the Hour of Danger

THE following incident was communicated to a minister, Rev. J. H. Saye, by two officers in the Revolutionary War. One of the officers was in the skirmish referred to and the other lived near the scene of action. It is to be regretted that the name of the heroine is unknown. "The inhabitants on the frontier of Burke County, North Carolina, were apprehensive of an attack by the Indians, and it was therefore determined to seek protection in a fort in a more densely populated neighborhood in an interior settlement. A party of soldiers was sent to protect them on their retreat. The families assembled, the line of march was taken toward their place of destination, and they proceeded some miles unmolested—the soldiers marching in a hollow square, with the refugee families in the center. The Indians, who had watched these movements, had laid a plan for their destruction. The road to be traveled lay through a dense forest in the fork of a river, where the Indians concealed themselves and waited till the travelers were in the desired spot. Suddenly the war-whoop sounded in front, and on either side; a large body of painted warriors rushed in, filling the gap by which the whites had entered, and an appalling crash of firearms followed. The soldiers, however, were prepared; such as chanced to be near the trees darted behind them, and began to ply the deadly rifle; the others prostrated themselves upon the earth among the tall grass, and crawled to trees. The families screened themselves as best they could. The onset was long and fiercely urged; ever and anon amid the din and smoke, the warriors would rush, tomahawk in hand, toward the center; but they were repulsed by the cool intrepidity of the backwoods riflemen. Still they fought on, determined on the destruction of the victims who offered such desperate resistance. All at once an appalling sound greeted the ears of the women and children in the center; it was a cry from their defenders—a cry for powder! 'Our powder is giving out,' they exclaimed. 'Have you any? Bring us some, or we can fight no longer!' A woman of the party had a good supply. She spread her apron upon the ground, poured her powder into it, and going around from soldier to soldier, as they stood behind trees, bade each who needed powder put down his hat, and poured a quantity into it. Thus she went round the line of defense, till her whole stock, and all that she could obtain from others, was distributed. At last the savages gave way, and, pressed by their foes, were driven off the ground. The victorious whites returned to those for whose safety they had ventured into the wilderness. Inquiries were made as to who had been killed, and one running up, cried, 'Where is the woman that gave us the powder? I want to see her!' 'Yes! yes! let us see her!' responded another; 'without her we should have been all lost!' The soldiers ran about among the women and children, looking for her and making inquiries. Directly came in others from the pursuit, one of whom, observing the commotion, asked the cause and was told. 'You are looking in the wrong place,' he replied. 'Is she killed? Ah, we were afraid of that!' exclaimed many voices. 'Not when I saw her,' answered the soldier. 'When the Indians ran off she was on her knees in prayer at the foot of yonder tree, and there I left her.' There was a simultaneous rush to the tree, and there, to their great joy, they found the woman safe, and still on her knees in prayer. Thinking not of herself, she received their applause without manifesting any other feeling than gratitude to heaven for their deliverance."

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## A Slender Hold on Life

It is wonderful how a tree will sometimes grow and flourish even in a most unnatural and precarious position. This pine tree, which is about twenty inches in diameter at the butt, and probably fifty to sixty feet in height, is poised on a large bare rock and receives its nourishment and support from but two roots which are seen extending over either end of the rock and down into the earth; and yet it puts forth its leaves and seems to be as healthy and as well satisfied as any of its neighbors.

The rock lies quite high above the surrounding earth, and there is not a vestige of soil upon it.

It is about fifteen feet long by seven in width, and the supporting roots go out over each end. The roots shown at the



in floating ice-cakes—and deposited in beds of sand which afterward hardened into the stone as we now see it. In some places they are held together so loosely that a kick of the shoe will disintegrate them.

Almost the whole of Geauga County is

used by the children of the very early day. On the left-hand arm-rest of the rocking-chair is a small tumbler that once was drained of choice liquor by George Washington, while he was being entertained in Providence. The smaller glass, on the right-hand arm-rest, came from a Confederate hospital in Virginia.

The smaller chair is over 200 years old. The coverlet and the mat both were made 200 years ago. The large cup and saucer on the small chair is of a kind of bread-and-milk bowl of the early day, and is very rare. All of these relics are in excellent state of preservation, and are owned in the home of William H. Goodhue and his widowed sister, Mrs. Mary Griffith, Michigan City, Ind.

## Defenders of Friday

FRIDAY is unlucky according to tradition, because it was on that day that Christ was crucified. Too, Adam and Eve, it has been declared, ate the forbidden fruit on Friday and died on Friday. Throughout the countries of Europe Friday is regarded the "black sheep" of the days of the week, and it is so looked upon generally by Buddhists and Brahmins. The day was called Nefastus by the old Romans, owing to the utter overthrow of their army at Gallia Narbonensis. In England Friday was known as "hangman's day." An old English proverb says that

daily use, either in transit or in loading or unloading. The male bird feeds his mate, flying to and from the truck while in motion, and, unlike some human travelers who pay for their tickets, he has never been known to miss his train. The starting signal invariably finds him at his post near the nest.

## Deer in Death-Lock

MR. CHARLES W. FONG, of Paisley, Oregon, sent us a most remarkable picture in that printed on this page, showing the heads of two deer in what proved to be a death-lock. When the deer were found by a cattleman one of them was still alive. Evidently the two animals had become engaged in a fight, their horns became locked in each other, and they were unable to extricate themselves, twist, turn and struggle as they would.

## Mummy of a Miner

THE body of a miner, said to have lost his life two thousand years ago, has been taken from a copper mine in Chile. Copper oxide had mummified his whole body. The mummy is in a fine state of preservation. Coarse sacking, evidently the clothing of the ancient Inca workman, was found with the body, as were also two mallets, one fashioned out of granite and the other out of iron-stone. These implements were tied with thongs into bent sticks made as double handles. Both the hide and the sticks were as fresh looking when found as if they had been in use only the day before.

## Couldn't Trap Quay

SENATOR KNOX has a story of the last fight the late Senator Quay, of Pennsylvania, made in the Senate. Quay was working hard on the statehood bill, obstructing legislation, when a scheme was fixed up to get him away from the Senate for a time. Quay was very fond of tarpon



Photo by H. M. Albaugh

A SLENDER HOLD ON LIFE

side, which are now almost rotted away, evidently extended over into the ground at one time. The query is how a tree ever started to grow in such a position.

This interesting tree is but one of a number of interesting sights to be seen in the gorge of the Cuyahoga River, near the town of Cuyahoga Falls, Ohio.

The sides of the gorge are covered with huge rocks similar to the one held in the embrace of the tree-roots. These have fallen from the ledge above, where the formation crops out. They belong to what is known as the conglomerate sandstone formation, and are composed of small round granite pebbles enclosed in a hard matrix of sandstone. It is easy to see that these pebbles have been rolled about a great deal, as they are very round and smooth; and you will not wonder at this when I tell you that their original home was north of the great lakes in Canada.

During the formation of our continent they were in some way broken from the parent ledges, conveyed south—probably

underlaid with this bed of stone; in some places sixty feet thick.

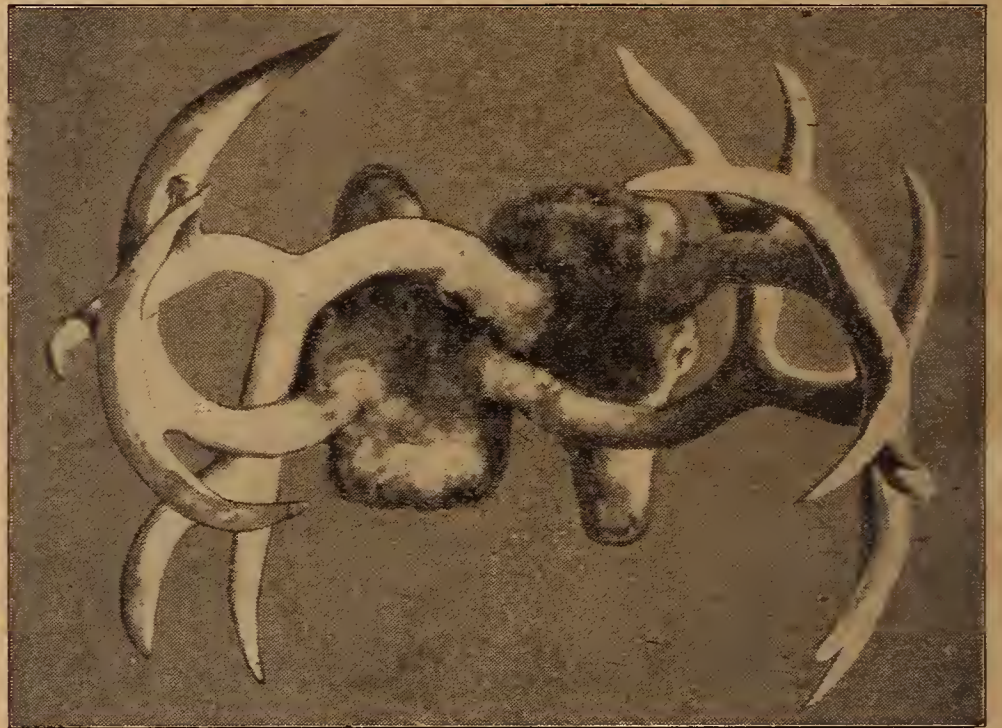
The gorge of the Cuyahoga in some places resembles that of the famed Niagara, on a small scale; but it was being worn away ages before the Niagara River was born.

H. M. ALBAUGH.

## Relics of "Mayflower" Days

THE rocking-chair shown in the picture stood in a house in Putney, Vermont, during the Revolutionary War, and is known to have been made long before that event.

The cup at the right-hand side of the chair (from sitter's viewpoint) came over on the "Mayflower," and belonged to the family of Elizabeth Tilley, who was the sweetheart of John Howland, the pair marrying about a year after the landing at Plymouth Rock. The knife also belonged to the Tilley family. The big plate in the center bears the imprint of a gnome, or as they were called in the early days, a "man-witch." The smaller plates were



DEER LOCK HORNS IN DEATH STRUGGLE

a Friday moon brings foul weather. It has long been a superstition among sailors that Friday is a bad day to go to sea.

In Scotland Friday is by far the favorite day for weddings. Charles Dickens says that nearly all the fortunate events in his life occurred on a Friday. Evidence is not wanting that Friday has been one of the luckiest days in the week.

Moscow was burned Friday.

Washington was born Friday.

Shakespeare was born Friday.

America was discovered Friday.

Richmond was evacuated Friday.

The Bastille was destroyed Friday.

The "Mayflower" pilgrims were landed Friday.

Queen Victoria was married Friday.

King Charles I. was beheaded Friday.

Napoleon Bonaparte was born Friday.

Julius Caesar was assassinated Friday.

The battle of Marengo was fought Friday.

The battle of Waterloo was fought Friday.

The battle of Bunker Hill was fought Friday.

The battle of New Orleans was fought Friday.

The Declaration of Independence was signed Friday.

## Birds' Queer Nesting Place

A CURIOUS story of a nesting place chosen by birds comes from Germany. A pair of redthroats, so a correspondent says, have built their nest upon a freight car running between Marbach and Heilbronn. It contains four eggs, upon which the female is now brooding. The curious part of the story is that the car is in

fishing and had a winter place in Florida. One afternoon he received this telegram from a friend who thought the senator might be in better business than pottering about new states: "Fishing never so good. Tarpon biting everywhere. Sport magnificent. Come." Quay read the telegram and smiled a tiny little smile. Then he answered it thus: "Tarpon may be biting, but I am not. M. S. Quay."

## Where Lincoln Put the Whetstone

THE Boston "Post" relates that at one time President Lincoln was conversing with an aristocratic American lady upon the subject of the United States, when she remarked: "I love my country, of course, but am much grieved that there are so many common people in it." He replied: "But, madam, think how God must have loved them; he made so many of them."

A soldier at whose house when a boy Lincoln paused in his tramps in Illinois, and who loaned him a whetstone to sharpen his jackknife, met him during the war, in Washington. Lincoln remembered the incident and spoke of the use of the whetstone.

"Ya-a-s," drawled out the old soldier. "Whatever did you do with the whetstone? I never could find it. We 'lowed mebbe you took it along with you."

"No—no. I put it on top of the gatepost—that high one."

"Mebbe you did; nobody else could have reached it, and none of us ever thought to look there for it."

There it was found where it was placed fifteen years before. The soldier reported the fact to the president.



SOME OLD AND PRIZED RELICS



Some Honorable Intentions

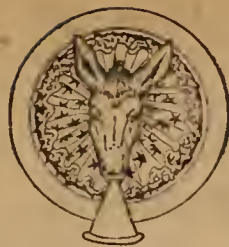
When I get time, and running slick  
Are all my mental wheels,  
I shall invent a perfume squirt  
For gasolineobiles.

I mean to make when I get time,  
A neat cash register  
For husbands' trousers pockets to  
Protect his coin from—Her.

And then a slot machine where one  
Can get for a small sum,  
A quick divorce as one can get  
A piece of chewing-gum.  
—Boston Transcript.

From Headquarters

At an unexpected interruption in an after-dinner speech Senator Hale smiled. "Those words," he said, "surprise and confuse me. They come with a shock. They come with a shock like that which a young girl of Lode received one night. "This young girl sat in her bedroom with a novel. Her hair was down and her feet were in red slippers. Now and then extending her white arms, she yawned.



Wit and Humor



"Unseen, Unseen"

Secretary Shaw recently told a story on Representative Smith, of Iowa, when the latter was a fledgling attorney and anxious to make a reputation for himself. A prisoner was brought before the bar in the Criminal Court in Iowa, but he was not represented by a lawyer. "Where is your lawyer?" inquired the judge who presided. "I have none," responded the prisoner. "Why haven't you?" "Haven't any money to pay a lawyer." "Do you want a lawyer?" asked the judge. "Yes, your honor." "There is Mr. Walter I. Smith, John

She Felt of Her Belt

I saw her go shopping in stylish attire,  
And she felt  
Of her belt  
At the back.  
Her walk was as free as a springy steel wire,  
And many a rubberneck turned to admire  
As she felt  
Of her belt  
At the back.  
She wondered if all the contraptions back there  
Were fastened just right—'twas an unceasing care,  
So she felt  
Of her belt  
At the back.

her too cook a big cake. wel, foolish like, i told ma, hoo Utterd wun grone an spoke no more. Wel, pa hoo had Crept up herd the hole Conversashun, an lookt hapy as a Lark.

Wel, like pa's unluckynes, his birth day hapined too be on the forth ov july. all so the day wen turrebel Things are dun. Wel, too mend the matter a awful Croud cum, an pa wus so hapy he wus sum times wite and sum times Red in the fase. All so tha woodent allow me too Play, sayin i wus too small, wich wus a foolish nosh-un, for i Pcept thru the crax an saw it all. too tel how pa Cut up wood fil a Volyum with foolshnes i no.

CHAPTER TWO

In wich the party Continuse

Partu soon wun by them sed les play so and so wich yu coodent hav under stood with a Dick shunary. wel, too be gin with, tha blind Folded pa an t'ide a Hankercheef over his nose an i coodent sec the balans ov the joke only pa run like a bee Stung boy an made a b-line for the peesful Fresh air with out excusin any body. After the laps of a few moments i saw pa in the kichen, wer ma wus boilin a poun cake. so pa sed Meria i am



First Tramp—"When I asked for a bite the farmer's wife shouted 'Welcome.'"  
Second Tramp—"Wasn't she kind? And did you enjoy the meal?"  
First Tramp—"Well I guess not. 'Welcome' proved to be the name of her dog."

"You see, it was very late, and down-stairs in the parlor her older sister was entertaining a young man. She naturally felt a deep interest in the entertainment. She was waiting to hear how it would terminate.

"And at last there was a sound in the hall, a crash as of a closing door, and it was plain to the impatient girl that the young man had gone.

"She threw down her novel, and running forth, peered over the balustrade down into the hall's intense blackness.

"Well, Maude," she said, "did you land him?"

"There was no immediate reply to her question. There was a silence, a peculiar silence, a silence with a certain quality in it. Then a masculine voice replied: "She did."—New York Tribune.

Why He Knew About the Apples

Not long ago a man was about to purchase a barrel of apples at the establishment of a produce dealer. They appeared to be especially fine ones, but an old farm-



Farmer—"Get out of here. The last time you were here you cheated me."  
Peddler—"Vell, that's why I call again. I don't like to lose such customers like you."

er standing near whispered to him to look in the middle of the barrel. This the would-be purchaser did, to find that with the exception of a layer at each end the apples were small and inferior.

"I'm much obliged," he said, turning to the old farmer.

"I've got some nice ones on my wagon I jest brought in," the old fellow ventured, diffidently.

"I'll take a barrel from you, then," the man said, paying him the price and giving his address for their delivery.

"Say," a bystander asked, as the purchaser walked away, "how did you know those apples in the center of the barrel were no good?"

A twinkle came into the old codger's eye.

"Oh, that was one of my bar'ls," he said.—Sturm's Statehood Magazine.

"I could die for you!" he cried.

"You don't say," retorted the girl, indifferently.

"And," he continued, "my life is insured for \$25,000."

"I am yours!" she cried, "till death."—Philadelphia Press.

Brown, George Green," said the judge, pointing to a lot of young attorneys who were about the court waiting for something to turn up, "and Mr. Alexander is out in the corridor."

The prisoner eyed the budding attorneys in the court-room and after a critical survey, stroked his chin and said, "Well, I guess I will take Mr. Alexander."—St. Paul Pioneer-Post.

Memories

I remember, I remember  
The gowns I used to wear;  
The yellow-figured jaconet,  
The purple-sprigged mohair.  
They always were a bit too long,  
Or else not long enough;  
And often in the latter case,  
Pieced out with different stuff.

I remember, I remember  
The roses, red and white,  
Upon my bayadere barege.  
(It must have been a sight!)  
My solferino balzarine—  
My lilac satinet—  
We gave that to an orphan child.  
(The child is living yet!)

I remember, I remember  
My magenta wool delaine;  
My salmon tagliani, too,  
('Twas lined with satin jean).  
My lovely light-blue empress cloth,  
Picked out with bands of dove,  
I wore the night Joe came to call  
And told me of his love.

I remember, I remember  
Those gowns so quaint and queer;  
I wore them with a happy heart  
For many a happy year.  
I have an ivory satin now,  
Embroidered fair with pearl;  
But, ah, I'm further off from heaven  
Than when I was a girl.  
—Carolyn Wells, in "Good Housekeeping."

Bell (in Stock Exchange gallery)—  
"What a hubbub! Why don't they sit down and rest?"

Maude—"Oh, it's too expensive. Richard told me that a seat there costs thousands of dollars."—Boston Transcript.

Woman—"Now, if you don't leave at once I'll call my husband—and he's an old Harvard football player."

Tramp—"Lady, if yer love him, don't call him out. I used to play wid Yale."—Judge.

Mrs. Justgott Hermunn—"My new home has stained glass in all the windows."

Mrs. Notyet Butsoon—"Now, that's too bad. Can't you find something that'll take it out?"—Cleveland Leader.

I saw her at church as she entered her pew;

And she felt  
Of her belt  
At the back.

She had on a skirt that was rusty and new,  
And didn't quite know what the fastenings might do,

So she felt  
Of her belt  
At the back.

She fidgeted round while the first prayer was said,

She fumbled about while the first hymn was read—

Oh, she felt  
Of her belt  
At the back.

Jack told her one night that he loved her like mad;

And she felt  
For her belt  
At the back.

She didn't look sorry, she didn't look glad—

She looked like she thought, "Well, that wasn't so bad."

And she felt  
For her belt  
At the back.

But—well, I don't think 'twas a great deal of harm,

For what should the maiden have found but an arm

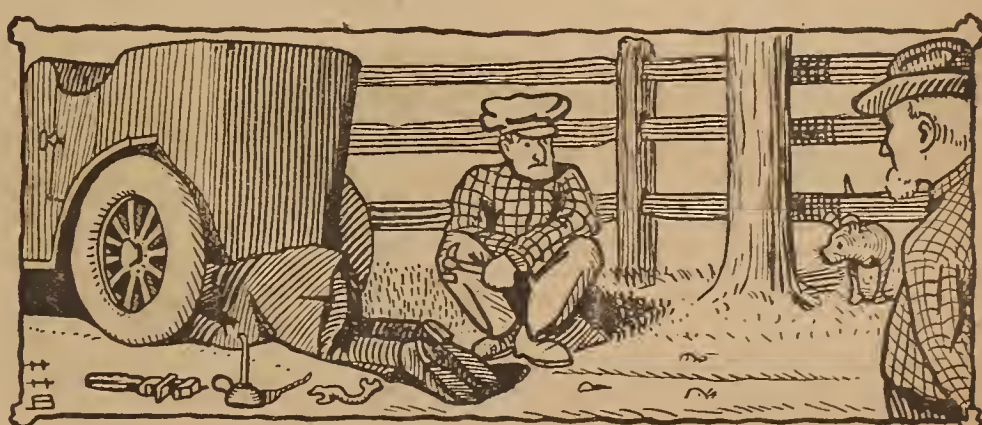
When she felt  
For her belt  
At the back.

—Los Angeles Herald.

Willie—"Papa, if I was twins would you buy the other boy a banana, too?"

Papa—"Certainly, my son."

Willie—"Well, papa, you surely ain't going to cheat me out of another banana just 'cause I'm all in one piece."—Judge.



Farmer—"How many horse power is your machine?"  
Autoist—"Well, by the way it is balking I should think it was about two hundred mule power."

A widow named Huggins has sued a New York man for breach of promise. Isn't it contributory negligence for a widow to have a name like that?—Houston Chronicle.

Pa's Birthday Party as Seen an Obsurvd

BY BIL

CHAPTER WUN

In wich the party be gins

Yu no pa is a awful hand too try nu Things, so on the last day ov june, wich pa declares he is a goin too Blot out of evry all manack in the earth, pa sed too me as he run his hand thru his Hare an made a Brod grin, bil, go an tel yure ma thet i am a goin too hav a Birthday party here on my birth day, an i am a goin too in Vite the hole naber Hood, an i want

strange as it May seem, pa declares the surrup dident all go down his Coller but thet sum wich wus the most ov it went co splash on the Brod side of Mr. snokes blak dog wich is a pup an ov that Variety called a spike Talc.

Any how the next day wich wus wen i wus Sleepy, i saw the same dog wich wus a pup lyin ded on the gras in our garden, wich i tride too wake him up an he woodent moove too Show he owned any life wich i dout. considerin all the jokes wich hapin i dont think Birth day partys pay. speekin ov birth day Partys makes me think ov wat pa sed. he sed he hasent got no birth day now, havin Burnt it all out with Steemin surrup, wich peeld off the hide in sum Places, an ma hasent bin Abel too cleen the stu pan yet.



## A Fourth-of-July Supper

BY LILLA THOMAS ELDER

One summer day, July the Fourth,  
I asked small Tommy Tupper  
To tell me what he'd like to have  
The most of all for supper.

"Why, first," he said, "I'd like a lot  
Of nice small lady-crackers,  
Then marble-cake and crystal-drops,  
And then some cannon-crackers.

"For drink I'd like some milky-whey,  
Stirred stiff—well, by a rocket,  
And then some flag-root nice and sweet  
To stuff in every pocket.

"I'd like some trumpet-flowers stuck  
In every dish's handle,  
And then, for lights, in empty spots  
I'd set a Roman candle.

"And for a centerpiece I'd like  
A flower-pot big and blazing—  
For such a supper, Aunty Jane,  
My appetite's amazing!"

## Some Things We Discovered Last Summer

WITH a houseful of visitors, and several of them small children, it seemed impossible to keep screen doors shut closely enough to keep out whole armies of flies, and the members of the family who were obliged to spend more or less time in the kitchen complained so loudly that the mater was almost in despair. Sticky fly-paper was tried, but oftener than not one of the small visitors became more closely attached to it than the flies, with, as we considered, rather more unpleasant consequences; then the old-fashioned fly-paper (poisoned) was tried; alas, the baby decided to take a sip or two out of the saucer containing it, and the result was a desperately sick little one and an almost distracted household. At this stage of affairs one of the visitors remembered the following "cure." Mix one half teaspoonful of finely ground black pepper with one teaspoonful of brown sugar, add sufficient condensed milk to make it into a smooth paste; place on small pieces of paper where the flies are thickest. We tried it, the flies ate, and, poor things, died almost immediately, and for us the problem of getting rid of them was satisfactorily solved, until with the departure of our small guests we found it once again easy to keep the house perfectly free of these little summer pests.

These same dear little tots insisted on writing innumerable letters to their papa, who was "so lonely" in the hot city, and no place would do for this work save a very handsome old mahogany desk. When they left us it was so badly stained that all the usual cleansers proved useless. The advice of a cabinet-maker finally made it possible to restore it to its pristine condition. For such a purpose mix twenty drops of spirits of niter in half a wine-glassful of water; allow a few drops of this to fall on each ink spot, doing only one at a time, and as soon as the stain disappears rub the spot with a cloth wetted in cold water, then rub it with a burnt cork, and finish with any good furniture polish. It is necessary to rub it immediately with the wet cloth, as if the niter is left too long it will leave a white spot that cannot be effaced. The lower part of the desk, which little fingers had left very dirty, was satisfactorily cleansed by washing thoroughly with a cloth wetted in warm ale, then dried, and polished with furniture polish, using a cheese-cloth duster to rub with.

A handsome davenport in which moths persistently strove to take up their abode, was saved by taking it out in the open air several times through the summer and giving it a light but thorough beating with a wire beater. It was then brushed very thoroughly to remove all dust, and sprinkled in all danger spots with a mixture made by dissolving a dram of camphor in two ounces of spirits of wine.

To keep these indefatigable little pests out of furs and woolen garments we tried the following sachet-powder with pleasing success: Take of patchouli leaves ground fine one half pound, lavender flowers pounded four ounces, ground cedar-wood four ounces, and essence of patchouli one dram. Mix and sift, and sprinkle among the clothing to be cared for, then wrap securely in newspapers, pasting the open ends together. A delicate and delightful odor clung about the garments thus cared for, instead of the odious aroma of the usual moth balls.

Another delicious sachet-powder for perfuming clothing is made as follows: Take one half pound powdered orris root, one fourth pound ground rose leaves, half a grain of musk, two ounces of powdered tonquin bean and two drops of es-



## In a Miscellaneous Way

sence of almonds. Mix and sift through a coarse sieve. This gives a delicate, elusive fragrance which is very pleasing.

Something more than sachet-powder is wanted to purify the air of a sick-room, and during a long siege of illness in our home, when the cooler weather made it necessary to keep closed windows a great part of the time, we found the following a pleasant and refreshing disinfectant: Put a little fresh ground coffee in a saucer, about two tablespoonfuls, and in the center place a piece of gum camphor the size of a small walnut. Light the camphor with a match and as it burns toss the coffee over and about it until a sufficient quantity has been consumed to freshen and perfume the room. This may be repeated as frequently as desired, the aroma being as healthful as it is refreshing and pleasant.

For the invalid's headache and other pains the following was found very helpful: Ammonia two ounces, tincture of camphor two and one half drams, common salt two ounces, and water two pints. Mix and dissolve without heat. This mixture is largely sold under a patent medicine name and is a helpful application for pains and bruises generally. For headache wet a piece of linen in the lotion and lay it over the seat of pain.

For sciatica and neuralgic pains the following was liked better: Heat a flat-iron sufficiently hot to vaporize vinegar, wrap it in a piece of flannel or woolen cloth moistened with vinegar, and apply as warm as can be endured two or three times a day to the painful spot. This is the simplest of remedies and one always come-at-i-ble, and often causes such speedy relief that a suffering patient sinks into a comfortable sleep.

MARY FOSTER SNIDER.

## How West Virginians Protect Their Sheep from Bears

IN THE Williams River country of West Virginia, says "Recreation," the bears are greatly on the increase, and there is a blue-grass settlement about the extreme head of the river called Beaver Dam which has all but been driven out of the



THE SICK LIVING IN TENTS

sheep business by bears. This is a hardship to small landowners whose farms lie at too great an elevation to raise grain.

On the Black Mountain run one man claimed to have identified the signs of one hundred and seventeen bears in one day's hunt. That seems a good many bears, but I have hunted and fished so long, and told about my adventures at so many camp-fires, that I cannot consistently deny anything. Nevertheless, every now and then a hunter runs onto a bear and kills it. Premeditated killing of bears is rarely known, as this wisest of the forest animals knows well how to avoid men. A rabbit is courageous compared to a black bear. This shows the superior intelligence of bruin.

About twenty years ago, an unarmed fisherman killed a bear with a large stone at the Red Hole. He was resting at the top of a precipitous bank of Mauch Chunk shale when a bear, chased by dogs, came

into the river and passed at the foot of the bank. The man cast a large stone down upon it and stunned it so that he was able to kill it. It was a two-year-old. The occurrence is well authenticated.

The sheep-killers are generally the biggest bears of them all, and are very wise. They never enter a field without first making a complete circuit to see if a man has crossed the fence. If he has, they "withdraw." One sheep raiser found that hanging half a dozen lighted lanterns about his farm caused the bears to leave his flock severely alone.

## Outdoor Life for the Sick

NEVER before in our history was there so much stress put upon the value of pure air and unlimited quantities of it as a curative force. It is also regarded as a most valuable aid in the prevention of disease, and people now go in for the outdoor life as never before. Methods of treating lung troubles have undergone a great change. Once the consumptive was carefully housed and allowed to breathe only the warm, heated air. Now it is believed by the most advanced doctors that the best thing for the consumptive is for him to keep constantly in the open air. Several of the states have established sanitariums where consumptive patients stay outdoors all of the time, even in the coldest winter weather. Massachusetts has a great sanitarium of this kind. Here may be seen nearly five hundred patients who practically live in the open air both by night and day. The writer visited this sanitarium on a cold March day when the snow lay deep all over the face of the earth, and he saw many of the patients walking about in the deep snow or sitting on the long verandas of the building as if it were a June day. They might as well have been without as within the great dormitories in which they live, for every one of the large windows and all of the doors of the dormitories were wide open and the wind was sweeping through the buildings. They had no heat in them, for they are never heated excepting for a short time in the evening when the patients are going to bed, and again for a

from this treatment. While there are not a large number of actual cures, the progress of the disease has been checked in a great many instances, and it could be kept from making further progress if the patients could continue their outdoor life after they leave the sanitarium. But many of them are unable to do this. They are poor and many of them must earn not only a livelihood for themselves, but also for others, and back they go to the store, the shop, the factory or behind the counter, and ere long they are again at the sanitarium or sick in their own homes. The writer knows of a woman patient who left the sanitarium four years ago and who has not slept in her own house a night in all that time. For two years she slept winter and summer in a tent in the rear of her house, and then she had a small veranda built out from her bedroom, and here she sleeps all the year through. While she has not been cured, the disease has been held in check and she has fairly good health.

Tents for patients ill of ordinary diseases are coming into use at some of our hospitals. Our illustration shows several hospital tents used by a hospital in the suburbs of Boston. These tents were used from the first of April until the first of December last year, and are in use again this year. Many patients prefer them to rooms in the hospital, and physicians find them better adapted to the needs of many of their patients. They supply unlimited fresh air to the patients and are free from what someone has called the "hospital smell." The sunshine finds its way into them at all times of the day, and they allow a degree of privacy not to be secured in a hospital ward. Physicians find them admirably adapted to patients having pulmonary troubles, and most patients prefer them to rooms inside the hospital. Fresh air and sunshine are two health-giving blessings that the country dweller may have in far greater abundance than the dweller in the congested parts of the great cities. The tightly closed room should not obtain in any home—no, not even in the sacred parlor. Let the sunshine invade even that holy of holies in your homes, even though the carpets do fade a little and the dust comes in with the sweet, fresh air. Keep outdoors all you can in the beautiful summer weather. It will help you to "keep sweet" in spirit. H.

## Other Ways of Saying "Howdy Do"

"How do you do?" That's English and American.

"How do you find yourself?" That's French.

"How do you stand?" That's Italian.

"How do you find yourself?" That's German.

"How do you fare?" That's Dutch.

"How do you perspire?" That's Egyptian.

"How can you?" That's Swedish.

"How is your stomach? Have you eaten your rice?" That's Chinese.

"How do you have yourself?" That's Polish.

"How do you live on?" That's Russian.

"May thy shadow never be less." That's Persian.

And all mean much the same thing.

—Scrap Book.

## The Indispensable Man

The "Old Man" his vacation takes  
Although he thinks it rash,  
Convinced without his guiding hand  
The firm will go to smash.

On his return he then finds out,  
Though not with unmixed joy,  
The business has been finely run  
By just the office boy.

The same surprise awaits us all  
Who run this little sphere,  
Bowed down with grave and heavy care  
Of bossing far and near.

There's nothing that will jolt us so  
Upon the farther shore  
As finding out the world we left  
Is running as before.

—McLanburgh Wilson.

## Rooster Beats Way on Train

WE HAVE all heard of hoboes, tramps and the like, becoming car-riders, but the Ocala "Star" declares that it remained for the Seaboard Air Line passenger train going to Tampa the other day to exhibit the first rooster tramp ever seen in Florida, and as far as we know in the world.

As the train arrived at the depot a half-grown rooster was seen flying from the middle car coupling to a pond, take a drink, scratch around at a great rate for a "grub-stake," and just as the conductor cried "All aboard!" the rooster flew to his perch, crowed its good-bys, and no amount of coaxing or shooing would cause him to leave his seat. The last heard of the rooster hobo was that he had reached Tampa.

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Farm Selections

Grafting the Black Walnut

Having a row of black walnuts along the road, and desiring to make them of some profit, I have been for the last ten years or more making experiments in grafting them to the French Præparturiens and all other kinds with marked success.

The largest trees are fourteen inches at the butt of the tree, and thirty to forty feet in height.

They are grafted from six to fifteen feet from the ground. The largest grafts are at least ten inches in diameter at the union. They have from six to twelve grafts on limbs as the tree seemed to demand to form a good top.

One odd thing about these grafts is the fact that many of them are ten times larger than the trees from which the scions were cut.

I grafted a small tree last spring that was about an inch and a half in diameter three feet from the ground. The graft grew seven feet during the season and the tree is just about the same height as it was before being grafted.

From my observation I think one could get an orchard of grafted black walnuts into bearing sooner than to plant the English walnut trees.

There is some difficulty in grafting the black walnut until you learn how. I find it is best to graft the black walnut just as it leaves out. The scions should be cut when dormant and kept in a moist condition.

Some varieties of the English walnut do not start to grow until after the black walnut is in leaf, and can be cut as wanted the same day. The best scions are taken from last year's growth. Scions cut from the butt of the limb, one half inch to an inch in diameter and six inches long, is the size I like best. The graft should be waxed and wrapped tightly with a strong string, which may be cut away a month after the graft starts, to prevent choking.

Sometimes the grafts grow so rank that a hard wind breaks out many of them. This can be prevented by cutting back.

W. H. BRYANT.

Kindness Pays

Did it ever occur to you that kindness under any circumstances always meets with a response? Among our families, dependents, friends or associates, the generous, kind-hearted man is always the gainer. Nor does the axiom that "kindness pays" embrace only the human race but applies with equal force to the dumb animals in our charge. The noble horse willingly responds to the uniform kindness of his groom or driver better than to abusive and harsh usage.

The patient cow gives a flowing pail of milk to her gentle milker, and enjoys her clean stall as much as we do a good bed. It is a joy to see a well-taken-care-of cow patiently chewing her cud and responding to the kindness of the good herdsman by her happy demeanor and evident contentment.

The sagacious dog will do anything, even to the risking of his life, for his kind master, and, if occasion requires, ferociously defend him if in danger.

Wild animals are trained as much by kindness as by coercion, indeed all nature liberally respond to deeds which savor of kindness.

The slovenly farmer or gardener, who neglects his crops, cannot be said to be kind, and has to suffer for his want of attention. If he does not give his plants a good bed to be in, provide them with proper material to nourish them, lets them be robbed or smothered by noxious weeds, chewed by rapacious vermin or destroyed by rust or rot, for the want of taking proper precautions to prevent it, or does not cultivate them so as to give fair play to their respiratory organs, he cannot be said to be treating them kindly; and what is the result? They give him no responsive satisfaction and are a shame to him instead of a pride, as they should be. Besides the loss financially, he has no pleasure in them, cannot take his neighbor to see his fine crop of mangels or potatoes, and would much rather keep away from his failure, caused by his own neglect, is a perpetual cause of secret annoyance to him if he is not utterly depraved.

On the other hand, the careful cultivator who has given due care to his work, meets a pleasing response in his plentiful harvest, and his mind reposes in the thought that he has done his best, and his efforts are amply rewarded by the satisfaction of having done so.

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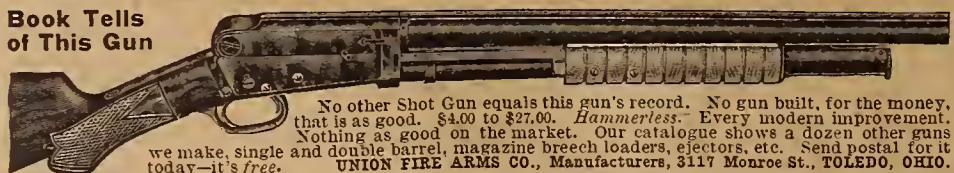
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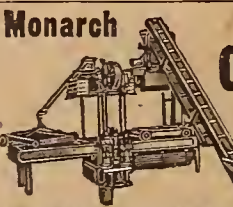
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## The Use of Tractors in Farming

By Waldon Fawcett

THE traction engine has long had a place in the list of mechanical helpers of the farmer, but of late this type of iron horse has been demonstrating its usefulness in a wide range of new duties. From the single task of hauling thrashing outfits its work has expanded until now we find the tractable tractor lending the greatest assistance to the tiller of the soil, in clearing his land and in plowing and harrowing as well as in harvest operations. Moreover the traction engine has proven a godsend on the great wheat farms of the West, where the grain simply could not be handled by the old-fashioned methods, principally because of the impossibility of securing sufficient harvest hands.

The new responsibilities which have been put upon the tractors have, naturally, resulted in a great improvement of the traction engines themselves. The new traction engines are not radically different from the old-fashioned style with which our readers have been familiar for years, save that they are larger and obviously more powerful. The up-to-date traction engines are found in several different designs, embodying the ideas of different inventors.

For instance, one very well-known type of twentieth-century tractor has a horizontal boiler, whereas another style has a boiler that is a modification of the vertical and horizontal combined. The boilers of these powerful tractors usually have a working pressure of 165 pounds, and they are fitted for burning coal, wood or oil fuel, the latter being extensively used in California and Texas, where these outfits find one of their greatest fields of usefulness.

The approved plan appears to be to fit the tractor with a plain single cylinder American balance valve engine, but a double engine is used in some instances. The steel frame of the tractor, well braced to the boiler and fastened solid to it, is made very rigid, for the flexibility of the two main wheels takes practically all the strain off the frame and boiler. The traction engine, it should be explained, is of the three-wheel type. The front wheel is hung in a circle, guided by friction rollers, and is operated by power. It is very easily handled, and the main wheels are placed so far forward that in working hard there is practically no weight on the front wheel. In such a case the steering is done almost entirely with the frictions. This brings almost the entire weight of the engine on the drive-wheels, and enables the tractor to haul what is, considering the weight of the machine, an enormous load. However, the traction engine is under perfect control at all times, even when working the hardest, pulling a load on a curved up grade.

In many of the larger traction engines in farm service the height of the drive-wheels is eight feet, and the tire is from twenty-four to twenty-six inches wide and three fourths of an inch thick, being formed from the best open-hearth steel. The spokes are one inch in diameter and made of the best American refined iron. The front or steering wheel of such a tractor is about five feet high and with

a tire fourteen inches wide. However, some very powerful traction engines have the front wheel three feet four inches high with a twelve-inch tire, and the main wheels four and one half feet high with tires sixteen inches in width. In any event the wheels act as a road-roller when running over a highway.

Of course it will be understood that the tire widths mentioned above are those designed for farm freighting and other similar tasks. Traction engines for plowing, harvesting, etc., have tires varying in width from two to six feet, according to the kind of soil they must travel over and the work the engine is to do. In the case of the smaller-size wheels an extension wheel may be fastened on the side of the main wheel when the engine is to be used on soft ground. However, the common practice is to use main wheels forty-two inches wide for harvesting, and add auxiliary wheels of the same size for plowing. The tires carry sufficient grousers to give them a good "bite" on the ground, and provision is made for putting on angle-

of these mechanical farmers is Stockton, California, the home of inventor Holt.

The value of the tractor in harvesting has long been recognized, but farmers who cultivate large tracts are only just now coming to realize the usefulness of these powerful aids in plowing, seeding and kindred operations. However, most convincing evidence of the possibilities of the field is afforded by the sight of a wide-wheeled farm engine drawing five gangs of six ten-inch plows with seeder attachment and harrows behind, and plowing, seeding and harrowing a strip twenty-five feet wide. Such an outfit finishes from fifty to eighty acres per day, and the tractor can be kept in almost continuous operation day and night if desired. The crew consists of four men, namely, an engineer, fireman, plow-tender and water-buck. Four horses are also needed.

At the Fair ranch, at Grafton, Yolo County, California, some interesting records have been made by the use of farm engines in plowing and kindred operations. Here four disk plows of five disks each

At the eight-thousand-acre farm of J. Thomas Kerr, in the Perris Valley, Riverside County, California, a farm engine is employed to pull fifty-five plows, taking a swath forty-one feet wide at a depth of four or five inches. The outfit consumes less than three gallons of fuel oil per acre plowed. The plows are operated at a speed of about three miles per hour. On this farm a plowing record of one hundred and ten acres per day has been made repeatedly, and on one occasion seventy-five acres were plowed in four hours and forty minutes. To do this, however, the machine was not slowed down nor stopped during the run, and the field was five miles around, giving long straightaway runs and comparatively few turns.

The main use of the farm engines of this character is, however, in harvesting operations. With such a steam outfit the grain is cut, thrashed and cleaned without the straw passing through the hands of a single man. With the aid of a power harvester a force of eight men will cut, thrash and clean the grain, place it in sacks and pile the sacks in lots of ten in the field at an average of 1,250 sacks of wheat per day. If headers and thrashers were employed forty men and an equal number of horses would be required to accomplish the work performed by the single tractor outfit.

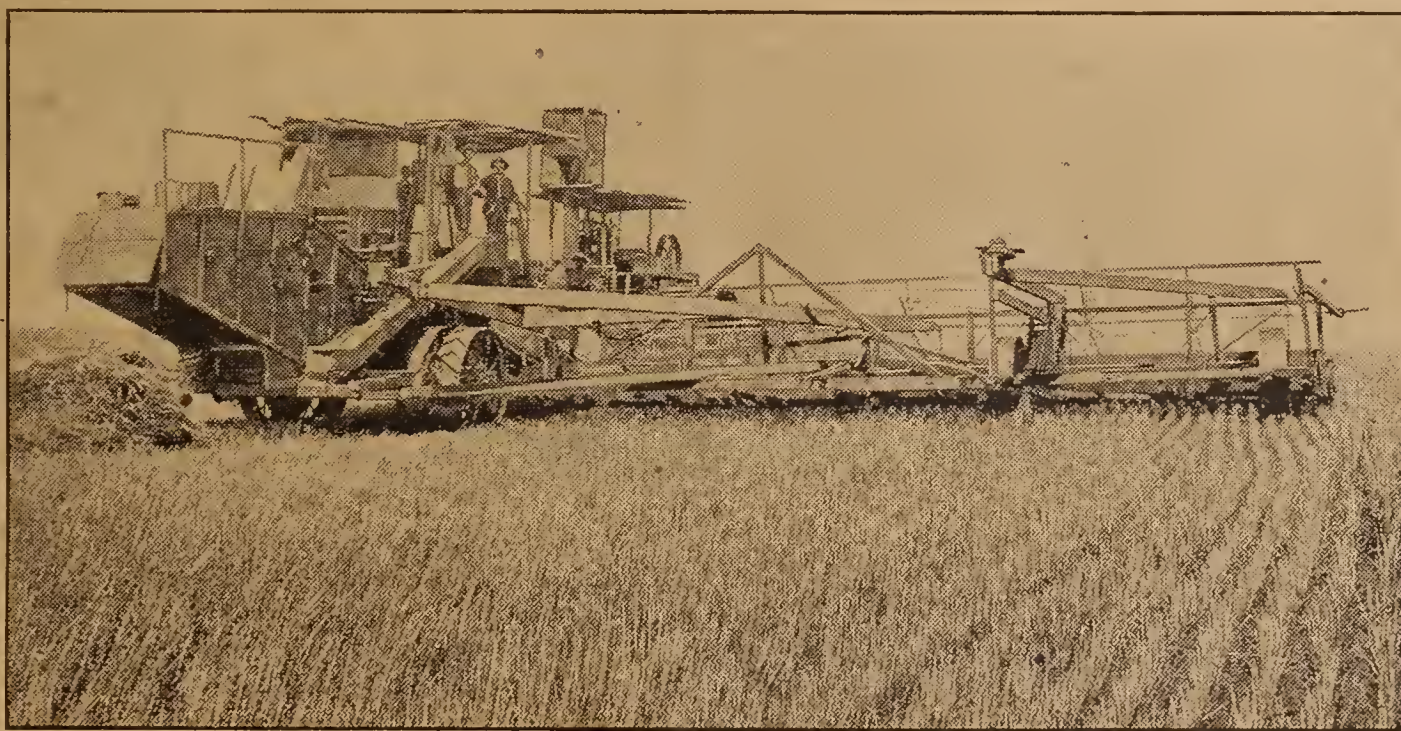
A representative steam harvester with a twenty-two foot header and twelve-foot extension takes a thirty-four foot swath, cutting, thrashing, cleaning, recleaning and sacking the grain, and will cover from fifty to one hundred and fifty acres per day. Such an outfit can be used on reasonably level land wherever climatic conditions are favorable. Only eight men are required to operate the outfit, namely, an engineer, fireman, water-buck, separator-man, header-tender, sack-filler and two sack-sewers. Four horses are needed for hauling water. The harvester in a standard steam outfit, such as has been described, has a forty-inch cylinder, a fifty-inch separator and a fifty-inch cleaner, with, as above

mentioned, a twenty-two-foot header with twelve-foot extension.

For use on more hilly ground there is a smaller-size outfit, of the same general type, which has a capacity of from forty to one hundred acres per day.

It is not too much to say that the capacity of these steam combined harvesters is almost beyond the comprehension of the average farmer unacquainted with this method of harvesting the grain. In hundreds of instances, under all sorts of conditions, they will harvest—which means cutting, thrashing, recleaning and sacking—an average of 1,000 to 1,200 sacks, or from seventy-five to one hundred and twenty-five acres of grain in one day, at an expense of not to exceed thirty to fifty cents per acre. Mr. John Hoffman, a prominent farmer of Walla Walla, Washington, recently declared that with the aid of a tractor harvester he this year handled his entire crop of something over two thousand acres at a cost of about one half of what he had formerly paid for

[CONCLUDED ON PAGE 5]



STEAM TRACTION COMBINED HARVESTER AND THRASHER

iron grousers when the engine is to be used on very soft ground.

A traction engine of the type described does not require as much fuel as might be imagined. The hourly consumption ranges from one eighth to one sixth of a cord of wood, 200 to 225 pounds of coal, or twenty-five to twenty-eight gallons of oil. The water-carrying capacity of the tank of the engine is from 400 to 700 gallons, and where the service in which the tractor is engaged will permit it extra tanks holding 800 gallons additional may be carried on trucks. The water consumption is from 2,500 to 3,000 gallons of water per day.

Farm engines of this class are coming into extensive use, not only in different sections of the United States, but in all parts of the world where agricultural operations are carried on on an extensive scale. In this country the tractors have been most extensively employed on the great farms of the West. Indeed, the type originated in California, and the great manufacturing center for the production

are used, making twenty furrows, and in ordinary plowing an average of more than forty acres per day was maintained for a long interval, whereas the area covered was frequently far in excess of the figure given. In harrowing the engine pulled five eighteen-foot harrows, covering 90 feet.

On this ranch the cost of operating the outfit above mentioned is set down as follows: Engineer, \$3; fireman, \$1.50; water-hauler, \$1.25; oil-hauler, \$1.25; six horses at 75 cents per span, \$2.25; feed for horses at 25 cents each, \$1.50; board for men, \$2; fuel oil for engine, \$5; lubricating oil for engine, plows, etc., \$1; making a total of \$18.75 per day. Under the old plan plowing was done on this farm with eight mule teams, each of which involved the following expense: Eight mules at 75 cents per span, \$3; feed at 25 cents each, \$2; driver, \$1.25; board, 50 cents; making a total of \$6.75. Such an outfit was considered to be doing good work if it plowed five acres per day, or less than one eighth the work of the present-day farm-engine outfit.



# FARM AND FIRESIDE

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## Comment

### The Equality of Justice

HOWEVER unpleasant and disheartening, it is really one of the hopeful signs of the times that crimes in high places are being exposed and polite criminals punished. It is evidence that the public conscience is being aroused, and that the instinct of self-preservation is impelling the nation to act as if it had begun to realize some of the dangers that threaten its existence.

Exposures here, there, everywhere in the land multiply until they seem to form an epidemic almost appalling enough to drive us all to pessimism and to ask if we are becoming a nation of thieves. In his commencement-day address, President Schurman, of Cornell University, said:

Among the rich and well-to-do business and professional classes "grafting" has become so common that the very idea of commercialism has become a by-word and a reproach. Financiers, capitalists, corporations may be the most conspicuous sinners; but equally guilty is the merchant who cheats his customers, or the lawyer who slows his client how to circumvent the laws, or the scholar who glorifies his patron's success in business irrespective of the methods by which that success was achieved, or the preacher who transfigures the ruthless oppressor and robber of six days into the exemplary Christian of the seventh.

We are dealing with the virus of a universal infection. The whole nation needs a new baptism of the old virtue of honesty. The love of money and the reckless pursuit of it are undermining the national character.

In speaking of the ruthless struggle for life and the success of the strongest, the

most cunning, or the most highly favored, whether by powers supernal or infernal, President Schurman describes an alarming condition and gives a timely warning. He says:

But the vast majority are fatally handicapped; and goaded either by the pangs of hunger or the pricks of envy or the stings of injustice they bitterly denounce a social order in which favored classes monopolize what they deem the good things of the world.

In a democratic republic, in which every man has a right to vote, be assured that the rights which convention grants to property will be swept away if the propertied classes become idle, luxurious, selfish, hard-hearted, and indifferent to the struggles and toils of less fortunate fellow-citizens.

Considering the remedies, President Schurman speaks of the supreme need for better hearts and wiser heads, and says:

Only with the development in the human race of reason and justice and honesty and kindness will economic problems be definitely settled. Meanwhile we must restrain the brutal and predatory pursuit of wealth by laws for the protection of the weak and for the equalizing of opportunity. And I have little doubt that the gigantic inequalities which the present system of distributing economic goods has brought about—here heart-rending poverty and there the opulence of imperial despots—will lead to a modification of that system in the interest of society as a whole.

To secure and maintain equality of opportunity the supreme need of the day is equality of justice. Unless it prevails new laws will be of little avail. It is the one effective remedy at hand, and in some degree it is now being applied. Let public opinion demand fair trials for all without favors for any, and the majority of courts will be impartial. It is this application of the equality of justice that is sending United States senators, bankers, railroad rebaters and ice-trust men to prison—giving them what they deserve, the same punishment common criminals get at the hands of the courts. In equality of justice is a promise of better things in the future.

"Ring out old shapes of foul disease,  
Ring out the narrowing lust of gold;  
Ring out the thousand wars of old,  
Ring in the thousand years of peace!"

"Ring in the valiant man and free,  
The eager heart, the kindlier hand!  
Ring out the darkness of the land,  
Ring in the Christ that is to be!"

### About the Work of Congress

The first session of the Fifty-ninth Congress will become memorable in history. Its record of laws of the very highest importance is a long one. While it is true that the efficiency of some of the greatest measures enacted remains to be determined by actual operation, or their validity by tests in the higher courts, the measures have been placed on the federal statutes to stay, and the faults, if any are developed, can be remedied promptly by amendments later on.

President Roosevelt, in expressing his gratification with the work of Congress, says:

I certainly have no disposition to blink what there is of evil in our social, industrial or political life to-day, but it seems to me that men of genuine patriotism, who genuinely wish well to their country, have a right to feel a profound satisfaction in the entire course of this Congress. I would not be afraid to compare its record with that of any previous Congress in our history, not alone for the wisdom, but for the disinterestedness which has controlled its action.

It is noteworthy that not a single measure which the closest scrutiny could warrant us in calling of doubtful propriety has been enacted, and, on the other hand, no influence of any kind has availed to prevent the enactment of the laws most vitally necessary to the nation at this time.

Of the long line of measures enacted some stand out preëminent, partly on account of their intrinsic importance, but mainly because they were passed at all. Among these are the

Railroad Rate Bill: Providing for rates to be fixed by an enlarged Interstate Commerce Commission, and penalizing rebates and other discriminations.

Meat Inspection Bill: Providing for federal inspection of meats intended for interstate commerce "from hoof to can."

Alcohol Bill: Alcohol free from tax if denatured for use in the arts.

Pure Food Bill: Making it a misdemeanor for any person to manufacture, sell or offer for sale any article of food, drugs, medicines or liquors which is adulterated or misbranded, or which contains any poison or deleterious substance, under penalty of fine or imprisonment or both.

It is now clear that while a majority of the members of Congress were with the people in favor of these measures an able and powerful minority worked for certain "vested interests," as long as it dared, to defeat them. They were passed simply because the people persistently and emphatically demanded that they should be passed. It was a sort of "initiative, referendum and imperial mandate" process that put them through. Some of the most powerful financial interests in the country had to give in to what they call "violent public clamor."

In a general way what Interstate Commerce Commissioner Prouty says of the Railroad Rate Bill may be applied to the other bills and to the "interests" that fought them. He says:

This bill is more significant in its passage than in its provisions. While President Roosevelt deserves the entire credit for initiating the movement, he would have been powerless but for the people's support. The enactment of the rate bill is the people's declaration that railways must submit to government control, and that certain abuses must stop. If the railways recognize this, if they cooperate, as there is every reason to believe they will, to obtain a compliance with the spirit of this law, conditions will be fairly satisfactory; otherwise there will be renewed agitation, followed by more drastic legislation.

*J. B. Barnett.*

### Problematical Effects

LIKE those who look upon the question from an unbiased standpoint, I rejoice that tax-free "denatured alcohol is to be a reality. The passage of this measure, by reason of public pressure upon our national law-makers, who are often so very unwilling to make concessions of this kind, is highly satisfactory in many respects.

The exact effect which the removal of the revenue tax on fuel alcohol will have on farm economics, however, is largely problematical at this time. It is true that the manufacture of alcohol from any starchy material—corn, potatoes, sugar-beets—is a rather simple proposition; yet for certain reasons it will probably not be practical for any individual farmer, or any small neighborhood of farmers, to engage in the commercial manufacture of alcohol, even where they have plenty of raw materials and wastes. The most that can reasonably be expected is that the central factories with which the country will be dotted will offer a market for some of the waste products of the farm now unsalable—small and unmarketable potatoes, scaly apples, beets, etc., but at prices by no means high. Yet we may well be satisfied with the outcome if it will come to pass that fuel alcohol will give us a better and cheaper source of light, heat and power than we now find in Standard oil and oil products, especially gasoline.

### Chemical Foods for Man and Beast

Anyone who has kept his eye on the practical results of the progress made during recent years in chemical science—the substitution of coal-tar products for natural coloring substances, for flavoring extracts made from natural fruits, and for all the choicest perfumes of natural flowers—will hardly wonder at the achievements of the noted German chemist, Dr. Emil Fischer, who has actually fed both man and beast on foods chemically prepared from such raw materials as coal. His work has already been referred to in these columns. Now it is reported that Doctor Fischer himself, in one of his tests, has taken no other food for a week or more but the product of his laboratory, and at the end of the test period found himself stronger and in better physical condition than before.

In another instance, two similar lots of pups, of the same age and breed, were kept under test for several weeks, one lot (five) being fed on natural food, the other

lot (also five) on chemical food alone, and the second lot, at the end of the test period, was found to have gained more in weight than the first. It is not easy to foresee or foretell to what practical results these discoveries and investigations in the chemical laboratory will finally lead us; but if one fourth of the reports and suspicions just now published about the doings of the great meat-packing establishments in the West are true, who would not rather feed on foods chemically prepared from wood and coal and other common raw materials than on the natural but nasty food products offered by the meat packers!

### The Life-of the Soil

"Sand and clay are but the skeleton of the soil; humus is its life." This is a quotation from an article in "Ohio Farmer," by Doctor Thorne, Director of the Ohio Experiment Station. There was a time when some of the hirelings of the fertilizer trade maintained that humus was really of little value, and that everything depended merely on the presence in the soil of the plant foods proper. The best results from the application of chemical fertilizers are usually obtained on soils rich in organic matter. I have at times tried in vain to raise good crops of vegetables by using very generous quantities of fertilizers—so-called "complete" ones, too—on poor, run-down soil.

Soil without humus is dead, for "the humus of the soil is the great storage battery of its elements of fertility, mineral as well as nitrogenous. It is in this store, chiefly or altogether, that our crops find their sustenance. When this store is exhausted they starve, and in proportion as it is reduced they hunger." This means, then, that the only way to build up a soil is by adding humus as well as potash, phosphoric acid and nitrogen.

*T. Greiner.*

### Investments for Farmers

QUITE a number of people having small sums of money have asked me how it can be most profitably invested. In almost all localities there are people who desire to borrow small sums for a year or two, and many of these are able to furnish good security. If the person having the money to loan cannot find these parties, there are insurance and real-estate men in every town and village who know them, and it is a good plan to make such loans through these men, if they are known to be reliable, because they have good opportunities for learning the financial standing of would-be borrowers.

There are many schemes advertised that promise an investor all the way from six to twenty per cent, but most of them are unsafe. I know many people who have invested from fifty to five hundred dollars in them, and a few as high as three to five thousand, and not one of them ever got all the money invested back again. Many felt themselves fortunate to get half of it back. One should be very chary about investing in schemes that promise profits unreasonably large. The promoters usually reap the profits and the investor yields the harvest.

Quite often I meet people who have saved up a small sum of money and are holding to it like they were afraid it would get away. In looking over their premises I could see a dozen places where the investment of a small sum would return a large profit in the saving of labor and in direct earnings. I know many farmers who have small sums lying idle which could be easily doubled in two years if it were invested in improved stock. Sometimes it could be made to earn large dividends if it were invested in convenient buildings and fences, or improved machinery for the farm or house. In making investments of this nature, however, one should use good judgment and common sense. If one has no buildings for the proper housing of stock there would be no sense in purchasing improved animals or fowls. The necessary buildings must be provided before the stock is purchased. The best stock can be kept "best" only by proper care and management.

*Fred Grundy*



About Rural Affairs

Creatures of Habit

THUS far this season the birds have dealt very fairly with us. They seem to have eaten their usual supply or more of insect food, as the insects that attack our crops appear to be less abundant this season than they have been for many years, and to care less for our fruits and crops than is their habit.

The blackbird, for instance, often does us much damage by pulling up the seed corn when the plants are first making their appearance above ground. I had expected to lose a good share of my sweet corn, as numbers of blackbirds were raising their broods in close proximity to the patch, and I was prepared to use the gun freely on them. In this expectation I had planted seed two or three times as thickly as I would otherwise. Now I cannot discover any of it pulled up by either blackbirds or crows, and consequently, for this season, these otherwise useful, because insect-eating birds, will find in me a protector rather than a persecutor.

We now have quite a lot of robins on the place, but not the usual excessive numbers. Southern pot-hunters probably have not been idle during the past fall and winter while this bird was with them. We may be able to save some cherries for ourselves without having to resort to harsh means against the marauders.

Birds are largely creatures of habit, and like the little miss, when they are good, they are very good, but when they are bad they are horrid. When the blackbird once gets into the habit of pulling up corn, or the robin of going into a cherry tree after cherries, and when they call every blackbird or robin in the neighborhood to help them enjoy the feast, they can do savage work and ruin whole crops.

The same is the case with rats, weasels and many other animals. Rats and chickens, or weasels and fowls, may live together peacefully for years, the rats feeding on grains, seeds and wastes, or the weasels on mice, rats, rabbits, etc., without either of them ever offering to harm a chick or fowl. But let one rat once get into the habit of killing chicks, or a weasel of killing fowls, and you will have to shut up your chicks and fowls pretty tightly, or else kill the rat or the weasel, before you will be able to check the depredations.

I try to treat each creature according to its merits in each individual case. I may keep gun and traps in readiness, but I do not kill unless for the very best of reasons, and only those creatures that have gotten into the habit of doing serious mischief.

Pure-Bred Fowls

Even in case we keep only one or two cows for family use, it is some satisfaction to have stock of true blood. We think more of the pure-blooded Jersey than of the grade, or of the cow of no particular breed. Yet practically it will make little difference to anyone who keeps cows for milk or butter only, whether he has pure-blooded stock or not, so long as he gets plenty of milk and butter.

But there is no excuse for any progressive farmer, or for the man or woman living in a country or suburban home, to keep fowls of any kind of mixed breeds, or of no breed of any particular kind. There is always money value in pure blood in poultry. This has been told time and time again, and yet the "dung-hill," or the mixture of all sorts, is the rule on our farms.

Eggs for hatching of pure breeds, especially of the modern improved kinds, the Orpingtons, the Rhode Island Reds, and also good strains of Plymouth Rocks, Wyandottes, Langshans, etc., are always in demand at prices two or more times those quoted for common eggs. The birds themselves are often salable for breeding purposes at prices much higher than obtainable in the open market.

The question really admits of little argument. The problem is only in what way we may most safely and cheaply obtain the starting point for the desired breed. With chickens this is comparatively simple. Eggs of all these breeds are easily obtainable from reliable breeders at reasonable rates, and a person can well afford to pay \$5 for fifty or one hundred eggs, and transportation. That will most likely give a person a good start.

I once paid \$4 for a setting of Blue Langshans, and raised one chick to the age when it showed that there was no blue in its plumage, only a very ordinary "smoke" color, and hardly regretted its loss by an early death.

This year I obtained ten turkey eggs (bronze and wild), costing me about \$4. One poult is the mcager result of the hatch, and I have lost interest in the experiment. Hereafter, when I want to get an improved strain of turkeys, I shall buy birds for breeding in the fall. The egg method, however, is usually good enough for securing a start in any breed of common hens.

Protecting Niagara Falls a Popular Fad

A Niagara Falls paper, in speaking of the scare about impending ruin to the falls unless a curb is put upon the diversion of water for power purposes, says:

People have been made to believe that they must hasten to Niagara if they expect to see other than the bare rocks at the precipice. It tries patience to observe some respectable papers and public men join in the craze, those who really ought to know better. Here is a case where popularity is a gross fraud—the great mass of the people is deceived.

As a matter of fact, there is no person who has lived here for ten or more years or since ante-power development days, who has been able to discover a perceptible lowering of the river owing to the diversion above the falls. The mighty waters rush and tumble now with apparently the same force and in apparently the same volume as they did long before the first power-development scheme was thought of.

This whole agitation is traceable in the first place to inspiration by one of the power companies, who thought it would be a good thing to head off future competition by getting up this scare of the destruction of the "Falls," and thus prevent the further grant of franchises to other prospective power companies. A bill to restrict the use of the Niagara River for power purposes will undoubtedly become a law, and so for the time being the first-mentioned power company has succeeded in "saving the Falls to monopoly."

I believe, however, that this restriction is a great wrong, not only as being a check to the wonderfully promising industrial development of this entire region, but also to the consumers of power, heat and light. This company does not offer us cheap power or light, even where we are so near to the power development, and

mile of earth is estimated, by Sir Ramsay, at \$2,500,000,000 on the basis of present prices of nitrogen.

In my own operations I have sometimes found nitrate of soda very handy and useful, but seldom indispensable. I am not disposed to lie awake nights worrying over the prospect that there may not be nitrogen enough for the uses of the soil-worker, and for profitable crop production. The good farmer has long since gotten the start of the chemist in this respect, and found means to procure a very material supply of nitrogen directly from the air. So long as he plants freely and frequently the common clovers, alfalfa, vetches, soybeans, cow-peas, etc., he will be able to procure all the nitrogen he needs from first hand, and in the cheapest possible way, whether the South American nitrate mines yield a pound or not. This does not mean, however, that the chemist should abandon the problem of fixing nitrogen from the air by other means and offering it to us in a cheap and handy commercial form. Even if not indispensable, it will be useful, and possibly profitable to the manufacturer. We are going to have it in such form, no doubt, and possibly very soon.

*F. Grimes*

\* \* \*

Salient Farm Notes

Don't Side-Line Your Pigs

I KNOW a farmer who formerly regarded his hogs as a side-line to his business of grain growing. He raised a number every year, but they were very scrubby stock; yet he always looked to his hog money for taxes, insurance, fence repairs, etc. An old schoolmate called on him one day, and in one of their chats he pointed out to him how he was losing money in raising such a poor quality of hogs. He told him he would not have a meat animal on his farm that was not of the best quality. They looked well and



DRILLS OPERATED BY A TRACTION ENGINE

not being threatened with serious competition, it has no inducement for being accommodating to the public.

Foolish sentiment, however, will not likely stand for any length of time in the way of the utilization of even the waters of Niagara Falls when required for the convenience and the necessities of the people. Possibly the Niagara Falls were destined to give us relief from oppression by the corporations which control the country's supply of coal and oil. There is water enough and to spare. Why forbid its use when it can be made so useful to the people at large?

The Nitrogen Supply

Sir William Ramsay, the English chemist, has figured out that the supply of nitrate of soda (or Chile saltpeter) is gradually "petering out," and in the course of a generation or so is liable to be entirely exhausted, and that to make up for this threatened loss, we must find some new, independent and reasonably cheap source of supply from which fixed nitrogen can be obtained.

I do not believe that there is the least cause for worry so long as "the air resting over each square mile of the earth's surface contains enough nitrogen in the free state to afford plant food for over sixty years of the world's consumption, if only it were combined." The value of this nitrogen in the air covering a square

ladies can play lawn tennis and golf all summer without hats on and with their sleeves rolled up to the elbows and still be stylish, I surely can run farm machinery and feed horses and pigs without becoming rough and coarse." The married woman says she must be outdoors a great deal to keep her health.

To all of these, and several others who have merely hinted these things, I say, go right ahead. Brawn is not required in doing much of the farm-work to-day. Good common sense and painstaking care are what are needed. I have seen several young ladies helping their fathers right along through the summer. They can manage a riding-plow, cultivator, mowing-machine, hay-rake, tedder, horse hay-fork, and any other machine that does not require special training much better than most of the men who seek employment on farms. And to see them when dressed for church one would never suspect that they knew anything about farm machinery. One of the best hog raisers I know is a woman. She does all the feeding and watering, and sees that their quarters are kept in the best sanitary condition. She also does all the light feeding of the other stock on the place, and no one ever says she is coarse or rough. No one ever hears her boasting about her success, in fact she never mentions her outdoor work outside of her family circle. She is obliged to live as much as possible in the open air. There are thousands of women who would be immensely benefited in health if they would do more outdoor work and less stewing around hot stoves in close rooms. And for those in moderate circumstances there is nothing more healthful and pleasurable than feeding and caring for stock. Of course there are some kinds of work connected with feeding that is a little heavy and should not be undertaken by a woman. But she can do all the light work, and do it vastly better than a boy or most farm-hands.

Most of the stockwomen I know are pig or poultry raisers, and as both are raised on grain and grass, there is less hard work about the feeding and care than of other stock. I never knew an earnest, sensible woman to fail in pig culture. I have known more than one farmer to turn an unthrifty pig over to his wife or daughter, telling her she could have half its value if she could raise it. In a few weeks thereafter that pig would be one of the best of the litter, and eventually would make a fine market hog. Sometimes the farmer kept his promise, and sometimes he did not remember that any bargain of the kind had been made. But if anyone wishes to see a litter of pigs grow into money all he need do is turn them over to an energetic woman, offering her half their value when marketed.

Many people associate pigs with dirt and filth. Give the pig a fair chance and it is the cleanest animal on the farm. Give it clean, comfortable quarters and sound, clean food, and it is one of the healthiest animals on the farm. The only incentive needed to make an enterprising woman a thoroughly successful pig raiser is the assurance that she will have a fair share of the price when the herd is marketed.

Weaning Pigs

One of the best ways of weaning pigs is to place a small trough just outside the pen when they are about two weeks old, and in it put a small quantity of skim-milk once a day. It is a good idea to set the trough down in the ground a little, so they can easily get their heads into it. They will soon find it, and when the milk is poured in will come to it. As soon as they learn where it is the milk should have a small quantity of corn-meal, bran and middlings mixed with it. About the fourth week the milk, corn-meal, bran and middlings should be mixed to a moderately thick slop. Gradually increase the thickening until it is more like a mush than a slop, and feed twice a day regularly, so they will be on hand at feeding-time. Treated in this manner they will almost wean themselves, especially if they have plenty of clover or grass. The trough in which they are fed must always be kept clean and sweet, especially while the pigs are small. Food that has soured is apt to cause trouble with the bowels. Pigs that are weaned in this way are not checked in growth when the mother is removed. If the milk supply is limited, water may be added to it to make the slop and mush. There is nothing to be gained by cooking food for pigs.

*Fred Grundy*

\* \* \*

"Loud is the summer's busy song  
The smallest breeze can find a tongue,  
While insects of each tiny size  
Grow teasing with their melodies,  
Till noon burns with its blistering breath  
Around, the day lies still as death."



The Card System in Crop Accounting

**A** FARMER is a manufacturer of food-stuffs. He produces food for man or beast, and sells the crop for what he can get, and often without any exact idea of the cost of the crop. Now, being practically a manufacturer, he should conduct his business precisely as does the maker of shoes or tinware. The manufacturer can tell precisely what his goods are costing him from week to week, and often from day to day. This, the best manufacturers now do by what is known as the card system of cost accounting. To understand just what this means we may take a crop, like potatoes, and make a card record of the cost of producing a supposed crop.

Fig. 1 is a sample of a crop report of time cost card. It consists in this instance of a sheet of stiff paper ruled with nine horizontal lines. Crossing these are thirty-six vertical lines. The vertical lines make spaces for the thirty-one days of any month, with one or more to spare.

Farmers' Correspondence Club

This rapid, easy, yet thoroughly businesslike method of keeping a crop cost account is worthy of careful attention. For that particular crop two more cards arranged as in Fig. 2 would carry the crop account to the harvest. At the end of August the farmer could see precisely what the crop cost before a single potato was dug. Knowing this, he would know just what the crop had cost per bushel the moment he had gathered and counted the last bushel.

Such a card system of cost accounts can be prepared with a few sheets of paper, a pen and a ruler, in an hour or two. It would be a cost account made without books. The cards would take up very lit-

"Now," said I, "if you will take my advice, sell eighty or one hundred acres of that land. Can you sell it?"

"Yes," he replied, "I have been offered \$3,000 for my west eighty."

"Then sell it. Spend part of the money in improving the remainder of your farm and stocking it with good cattle and hogs. Then you will see the money coming in."

A few days later I drove by his farm. The fences were almost down in many places, the farm buildings were rapidly going, and a rank growth of weeds and bushes covered some of the best portions of the farm. The owner was working slavishly in the field trying to get his corn ground all planted, late in the season. The

a few small, dry limbs, broken up, on the straw, and set fire to the straw. Keep piling small dry limbs on the fire until the wood gets to burning, after which keep piling other brush over the fire until it gets under headway. In this way you can get any heap to burn.

Tobacco Stems

Tobacco stems are worth about four times as much as an equal weight of stable manure. They can be spread and plowed under like ordinary manure, or worked into the compost heap. They make a good mulch to put around fruit trees, and are good around such crops as melons and squashes. There is nothing better to make hens' nests of; the lice won't bother nests where the tobacco stems are. Throw the tobacco stems over the henhouse floor.

Ohio. M. JACOBS.

Cleaning Up an Old Field

In some of the older states there are many old fields that have been cropped until they fail to bring paying crops, and

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total	Price	Cost
Fixed Charges.....	\$ 6.00																																	\$ 6.00
Loads Manure.....					12	3																									15	.50	7.50	
Hours' Teaming.....					5	1																									6	.30	1.80	
" Plowing.....											6																				6	.30	1.80	
" Harrowing.....											5																				5	.30	1.50	
" Plowing.....												4										4									4	.30	1.20	
" Planting.....																						3									3	.20	.60	
Bushels Seed.....																						1 1/2										1 1/2	.50	.75
TOTAL.....																																		\$ 21.15

FIG. I. MAY CROP CARD—POTATOES

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total	Price	Cost	
May Card.....	\$ 21.15																																	\$ 21.15
Cultivation.....																	7														14	.30	4.20	
Spraying.....																															5	.20	1.00	
TOTAL.....																																		\$ 26.35

FIG. II. JUNE CROP CARD—POTATOES

The card thus consists of a large number of little squares arranged in horizontal and vertical lines. At the left of the card are eight names for the horizontal (right and left) spaces. At the top are the days of the months (or up and down squares), each series standing for one day. At the beginning of the season, or May 1st, the card is tacked up in some convenient place in the house or barn, and on or before the first day of the month is placed at the top of the first line of spaces the fixed charges against the coming crop. These fixed charges are the taxes and interest on the piece of land that is to be planted with potatoes. We may call this sum six dollars, so, opposite the words "Fixed charges" is placed in pencil the sum of \$6 in figures. Nothing more is done until the fifth of the month, when twelve loads of manure are hauled out to the field. The work being done, the farmer enters at once, on returning to the barn and before he can forget it, the number 12 on the second space of the fifth column. It took five hours' labor with one man and horse to do this work, so the figure 5 is written in the same column opposite the words "Hours' teaming."

In the same way six hours spent in plowing on the eleventh day are shown by the figure 6 in the eleventh column opposite the words "Hours' plowing." In like manner we see that on the twenty-second day of the month there were four hours spent in plowing out the furrows, three hours in planting, and that on that day one and one half bushels of seed was planted. Nothing more was done that month, and then the amounts on each horizontal line of spaces is added up and put in its place under the word "totals." The fifteen loads of manure are worth fifty cents a load, and this is put next to it in the price column. Then the total cost is placed in the next column, or fifteen loads at fifty cents, \$7.50. The same bit of arithmetic is quickly performed for the other items, and when the card is complete we can easily see at a glance what each thing cost, whether labor of plowing, harrowing or planting, or the seed, interest and taxes. Finally, the last column is added up below and we get the actual cost of the crop up to the end of the first month.

Fig. 2 is a sample card for the next month. As the work consists of cultivating and spraying, only four spaces are needed in each column. It is plain that in this card the total cost, up to the last day of the previous month, must come first in order to carry the account forward. We readily see that on the sixteenth and the thirtieth of the month the farmer spent seven hours in cultivating the crop. The total is fourteen hours at 30 cents an hour, or \$4.20. A boy spent five hours spraying the plants on the thirty-first at 20 cents an hour, or \$1. At the end the total shows the cost of the crop at the end of the second month—\$26.35.

tle room, and could be filed away for future reference. Such a system of card accounting is applicable to any crop, whatever its character or size. The system could also be applied to all the farm-work as a whole. A single card at the end of the year could be used to show the total costs of all the crops, and the grand totals for the whole farm for the whole year.

"hand" he had expected to keep all summer had left him for a city job, and he had all the work to do.

"Last year," he said, "I lost a great deal by not having hands enough in my harvest and haying seasons. I have about decided to take your advice and dispose of some of my superfluous acres."

Many of our farmers are in somewhat

have then been turned out. They soon grow up in brush and briars. In this part of the country much of the old land grows up in greenbriers and young timber. The greenbriers grow so thick and sprout so badly when they are dug out that it is a practical impossibility to kill them by cultivation.

Some years ago I undertook to clear an old field that was overgrown with young pines and greenbriers. The greenbrier roots had so taken possession of the soil that it could not be plowed, and if the land had been broken they would sprout year after year. I went through the field and cut down the pines. When they got dry I set fire to them and burned through a large part of the brier patches. The fire killed many briars that were not burned up.

In a month or two I went through the field with fire again and burned all filth that would burn. Cattle and sheep were allowed to pasture over the field and wherever a brier sprouted up they bit it off.

Whenever I found a patch of briars dry enough to burn through I set it on fire. At the end of three years the briars were all killed out and the roots dead. The field was ready for the plow. With a little manuring it brings fairly good crops.

A small corner of a patch of greenbriers was fenced into another field and the briars cut off, and this corner has been a bother ever since. It has been sprouting for the last ten years, although it has been gone over with the plow every time the field has been plowed, but the brier roots have been so bad that it could not be plowed much. In such cases, if it can be done, it is better not to attempt to break the soil until all roots that sprout are dead. Plowing makes locust roots, sassafras and greenbrier roots sprout worse than when the soil is not broken.

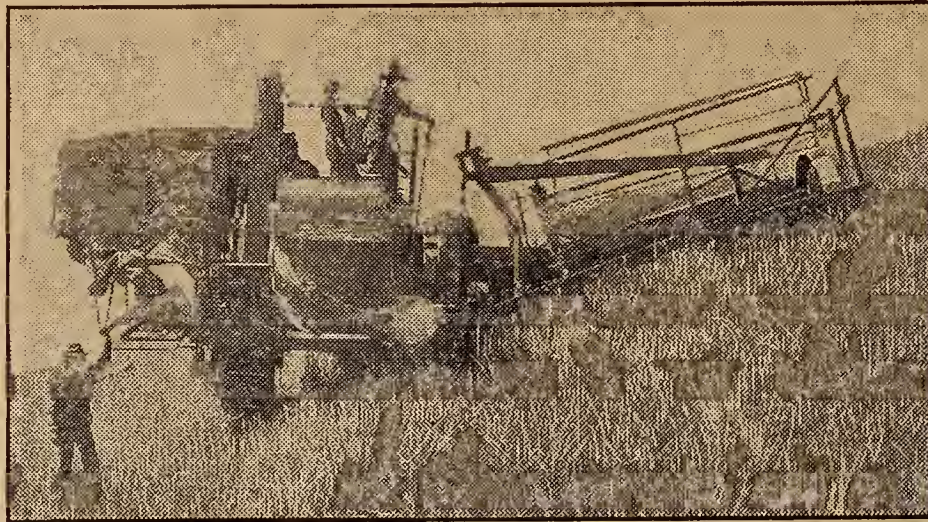
West Virginia. A. J. LEGG.

Weeds as Feed

It was Luther Burbank, I believe, who said that weeds are plants whose uses have not been discovered. Many people now living remember when the tomato was thought to be poisonous. Perhaps many farmers are raising, against their will, and leaving to go to waste as worthless, large crops of stickweed, not knowing that it is a good winter feed for sheep. Sheep will leave good timothy hay to eat stickweed hay, and horses and cattle leave only the hard, woody stalks. Ragweeds, too, are relished occasionally by horses and cattle, and may be made a large part of the ration for sheep in winter.

Last summer I cut a quantity of coarse grass growing in a swale, with edges like a hand-saw, intending to use it to stop the wash in gullies. But the horses ate it with such relish while mowing that I decided to put it up as hay, and the cattle ate it up clean in the winter.

Ohio. ROBERT BRADFIELD.



TRACTION HARVESTER REAPING THE HILLSIDES

Such a system can be readily applied to dairy products, to poultry raising, to cattle raising and feeding, breeding of horses, sheep and swine, and to bee and poultry keeping.

Connecticut. CHARLES BARNARD.

A Correction

In a late issue of the FARM AND FIRESIDE, in a short article appearing over my name, I said that "unslaked" lime sprinkled over the head and leaves of cabbage was a good remedy to kill worms. I should have said "air-slaked" lime.

Missouri. JAS. E. SPERLING.

The "Land-Poor" Farmer

In these days of scarcity of labor the "land-poor" farmer is by no means an imaginary creature. I had this very strikingly illustrated to me the other day when a young man of my acquaintance called to see me. In our conversation he remarked very despondently, "Farming does not pay and I mean to quit it."

"Why, what is the matter now?" I asked, somewhat surprised.

"I can't make any money," he said; "by the time my expenses are paid my profits are very slender."

"How much land have you?" I inquired.

"I have two hundred and twenty acres."

"Do you raise any stock?"

"Well, I have four cows and a few hogs. You see," he added, "I haven't time to look after my stock."

similar circumstances. This man had at least one hundred acres more of land than he needed—about \$4,000 invested that was bringing him practically nothing. The size of a farm here in the Middle West is not indicative of the amount of money one is making. Even when the land is good a man cannot make a success managing a large farm and doing a big share of the work in the field himself. Farm labor is scarce and high priced at the present time, and as a rule very unreliable. A small, well-tilled, well-managed farm, with just as much stock on it as the farm will produce feed for, is all a man needs in order to make good money for his time and capital invested.

The ambition to be a large landowner sends many a young farmer to the wall. One must not have a single rod of waste land. Fences and buildings must be kept in good repair. The stock must be cared for properly. The orchard and garden require attention, and all this is impossible with the "land-poor" farmer. Don't buy more land. To improve what you have and cultivate it properly is the only true road to success in farming.

Indiana. BEN J. WADE.

Burning Brush Heaps

Many may have difficulty in getting brush to burn. Take a handful of straw, hay, leaves, or any dry trash that will readily burn, and place it right on top of the heap, where the brush is thick enough to hold the fire from falling through; place



### Clip the Weeds

IN THE "Practical Farmer," Mr. T. B. Terry gives some timely advice about the use of the mower in fighting weeds. He says:

After the wheat is out of the way mow the stubble over as soon as weeds begin to show up a few inches high. Better not do this when it is very dry and hot, or, if you must, then set cutter-bar high. Keep watch and mow again if necessary, before any weeds get far enough along to possibly ripen any seeds. Remember what you are after, to keep all weeds clipped off so they cannot seed, then do it.

Don't wait until the mischief is done and then mow. Mow on time. It is not unusual to see someone mow a wheat stubble after some weed has got far enough along so the ground will be completely sown with the seeds, later to make trouble in after years. One slip of this kind and years of care may go for naught.

A farmer must think and watch. Therefore have I so often urged that he should not work too hard himself, that he employ more help, so he can have time to think and keep watch of all such matters. Haphazard farming does not often pay very well now.

The clipping of weeds and tops of young clover in the wheat stubble will thicken the clover; will encourage it while discouraging the weeds. It is poor business management to let a crop of weeds grow up and go to seed in the wheat stubble. But alas, many do it. What is the usual result? Why, if the fall is wet there may be such a rank growth as to pretty much smother out the more feeble young clover. If it is dry, then the weeds take up about all the water there is, and in it the available plant food, and good-by clover.

The farmer wonders the next spring why he does not have any luck with clover any more. There may be other reasons, but on many a farm the mass of weeds that grew in the same field with the clover was reason enough. This is no small matter. The loss in the aggregate is enormous. And then the land is heavily seeded with weeds for the future. You see, weeds are ranker growers than the young clover plants, and if they get the start will keep it.

A six or seven foot cut mower will head them back at the rate of about two acres an hour; forty cents an hour is good pay for man and team and mower. Forty cents' worth of hustling work done on time may make an acre of fine clover, free from weed seed, instead of a ton or more of weeds gone to seed and little clover left. Seems as though a child ought to see that forty cents spent in this way is a grand investment. Why, the per cent of profit is far beyond what any trust in this country ever makes.

### Soil Improvement

The following is a summary of a practical address by Prof. W. F. Massey, before the Pennsylvania Farmers' Annual Normal Institute:

We have no worn-out soils—though we do have those which are reduced to an unproductive condition, and some which never were very productive. It is not possible to wear out ordinary farm land. The old fields of the South are an illustration. Some were reduced to an unproductive condition and abandoned. Broom sage and the white pine began their work—the pines going down into the subsoil and storing up any leaves and wood material that made new surface.

There is a nearly inexhaustible store of plant food. Nature's way is to bring up some of this supply of minerals from the subsoil and to provide humus. The importance of moisture-retaining humus is great. The soil elements usually lacking are nitrogen, phosphoric acid and potash, and sometimes lime. One only may be lacking.

In ordinary grain farming the man who buys artificial nitrogen is wasting his means, and need never do this if he farms rightly. There is no nitrogen problem while the air contains inexhaustible supplies. The growing of legumes and live-stock farming will take care of the nitrogen. The question is that of cheapening the supplies of phosphoric acid and potash. In clay soils the potash is abundant and needs only release.

Phosphorus may be secured through the purchase of feed by those whose conditions warrant such purchase, and for others the purchase of commercial fertilizer is indicated. Live-stock husbandry always is good, but it is not always practicable. The cases are rare in which we can advise farmers to abandon live stock and to depend upon chemicals and clover.

In all parts of the country difficulty in getting clover is reported. These failures where clover formally was successful are due to exhaustion of the mineral elements and to soil acidity. The experiments at the Ohio station indicate that the use of acid phosphate increases soil acidity.

The use of floats with stable manure is being urged by good authorities. Humus is essential. Lime is needed on all acid soil,

## Review of the Farm Press

but farmers must not make the mistake regarding lime as a manure. A short crop rotation, the use of legumes, the supplying of needed fertilizer, and the feeding of live stock were forcibly urged in this address.

### Automobile Scorching

The "Farm Journal" has been carrying on an interesting campaign against the automobile road hog, and feels encouraged over what has been done to train him properly. It says in the July issue:

It is a matter of felicitation that some of the automobile clubs have decided to aid in the enforcement of the law against the scorching of the road hog. This position has been assumed as a matter of policy in order to change public sentiment, which seems to be against the automobile and its driver. Some of the new laws are drastic, and the autoists, by taking the stand they have, think that the public will learn that all autoists are not violators of the law. In some places special committees of automobile clubs have been appointed to see that reckless drivers are arrested and fined.

We are glad that reason is resuming its sway in some heads, and we hope that the same conditions will manifest themselves in many other parts of the country. Heretofore many autoists—decent, and the other kind—seemed to be handed together to break and defy the law, and farmers had little sympathy, and less help, in protecting the highways from encroachment. While we do not anticipate that this movement will be much in evidence the present season, we are inclined to believe that it will spread, and the road hogs will be relegated to a class by themselves. Nevertheless, these measures, being adopted as a matter of policy and not principle, may not amount to as much as we hope.

Confident we are, however, that unless there is a reform in the way of the motorists, they will have to travel a rocky road in the future. Farmers are slow to anger, but

the protection of their highways. The more firmly they stand up for their rights the sooner roads will be built for motor vehicles, and the sooner the average country road will be practically free from the scorcher, and safe to travel upon. A reform will be much further off if farmers supinely permit themselves to be imposed upon. This talk of one hundred-foot-wide roadway building between all great cities, whereon motor vehicles may have the right of way, comes from the determination of the public to stand its ground, and not allow the road hog to roam at his free will. Keep it up.

### Sheep Sorrel

Sheep sorrel furnishes a striking example of the spreading habits of some noxious weeds. In its steady march westward it has reached Iowa. Of this unwelcome guest "Wallace's Farmer" says:

We have had a number of samples of the same weed sent us for identification from different sections of the country. It is known as sheep sorrel, and belongs to the dock family. It grows from the roots as well as from seed, in this respect being similar to quack grass, Canada thistle, morning-glory, hind weed and horse nettle. It is often found on old farms, farms that have been cultivated for a long time, from Chicago eastward, and of late years has been spreading more or less in the West. It thrives best on acid soils, and the remedy used for it in the East is lime. It also grows on lands that are not acid, however, but is not nearly so likely to become a pest as in acid soils.

Sheep sorrel is mainly found in small patches, where it has only been for two or three years, and spreading from the roots. Where there are small patches existing, we would simply mow it off. Where the field is badly infested, we would manure heavily, cultivate it in corn for about two years, then after a fine seed-bed is prepared seed down heavily to clover and timothy.

In short, the best way to deal with sorrel



TRACTION LUMBER TRAIN ON THE ROAD

when once aroused it will take something more than promises to appease their wrath. It will take as long to appease them as it did to make them mad.

But the automobile must keep off the narrow country roads used by drivers of horse vehicles; roads must be built suitable for autos, free from the complications that will arise from an attempt to make automobiles and women driving horses at home on the same roads. We have said from the beginning that the auto people must have roads of their own if they want to go fast; and why not, if they do not transgress the rights of others, let them go fast. And it's coming, and coming much quicker than most people think. There is talk now of building a highway 100 feet wide from Philadelphia to Pittsburg, and such a road is almost sure to be built, and that before very long. And such roads connecting all the large cities of the country, are among the probabilities of the near future. While these roads are being built, mainly for motor vehicles, to keep pace there will be a general movement for the betterment of roads used by horse vehicles. Thus the "Farm Journal" reads the signs of the times.

In the meantime we urge farmers to organize safe road clubs as indispensable for

and other weeds is to keep the land well seeded to grass and well manured. This is our general recipe for getting rid of weeds: Keep the land so full of good things that there is no space left for bad ones.

### Grazing Crops for Hogs

Answering a question about the best grazing crops to raise in Virginia for hogs, Prof. A. M. Soule, in the "Practical Farmer," gives the following:

Rape should be sown from the 1st to the 15th of April, on well-prepared land in drills about twenty-four inches apart, at the rate of about four pounds per acre. Cultivate lightly, and let the crop grow until the leaves touch across the rows. Then turn the hogs on small areas at a time. Feed them a little grain, consisting of corn and middlings; corn, bran and middlings; corn, oats and middlings, or corn, linseed-meal and middlings. From one to two pounds per day, depending on the size of the hog, will be sufficient, and they should do well on this ration. After the rape is gone, early-sown varieties of cow-peas should be available, especially as you can grow the rape in a succession by seeding a patch two weeks later

than the first. If you will get some Warren's Extra Early cow-peas, some Whippoorwill and some Clay, they will come along so as to furnish you grazing through a good part of the summer and fall. Then soy-beans, such as the Itho San Yellow or the Mammoth Yellow, will furnish grazing until cold weather. You can graze hogs on this succession of grazing crops with a minimum supply of grain, and with comparatively little care and expense. They will keep healthy, as a rule, under these conditions, and you will avoid the objectionable method of keeping them confined in filthy pens, which is now too often followed on our farms during warm weather, and which is the best way to insure a good many of them dying with hog cholera. Young pigs to be finished on grazing crops should be fed through the dam as long as possible, and taught to eat a little grain before weaning. They might be turned on grazing crops to some advantage, with the sow, but best results are obtained from grazing hogs with hogs that weigh from 80 to 100 pounds when first turned on. If some kitchen slops and skim-milk are available to keep the young pigs growing and supply a better balanced ration immediately after weaning, they are not very likely to fall off in condition when taken from the dam.

Although these particular crops are recommended for one state, the principle of growing a succession of grazing crops for hogs is of general application by the selection of the crops best suited to each latitude.

### The Use of Tractors in Farming

[CONTINUED FROM PAGE 1]

performing the same amount of work with headers and thrashers.

Moreover, the steam harvester can handle grain in almost any condition, whether it is standing, lodged, tangled or overgrown with weeds, saving the grain satisfactorily. Then, too, the performances of these machines in harvesting on soft ground have been little short of miraculous. A steam harvester of approved pattern costs \$1,700 or more, and such a machine is seldom purchased by a farmer for his own use unless he has one thousand acres or more under cultivation. However, many men have purchased tractor outfits in order to make a business of cutting grain on contract for farmers. Men such as D. J. Nebergall, of Pendleton, Oregon, have cleared from \$2,900 to \$3,500 per year by such operations, and it is worthy of note in passing that this Oregon operator on one occasion thrashed 1,720 sacks of wheat in a day.

No mention of tractors in the rural field would be complete without reference to the use of the engines in logging and clearing land and in freighting. In many parts of the West there are rich farms located some distance (perhaps fifty or sixty miles) from a railroad, the products of which form too great a bulk in the aggregate to be handled easily by the six or eight horse freight teams, yet are not large enough to justify the building of a branch railroad. In this field the traction engines which will do heavy hauling, up to say one hundred tons per day, for less than half of what it costs to do the same work with horses, are coming into extensive use. The road engines, so called, are almost identical with the farm engines, save that most of the parts are made stronger.

The average engine of this type will haul a load of from forty to sixty tons, depending on the character of the road, at a speed of from two to three miles per hour loaded, and three to four miles per hour, empty, ascending with a full load grades up to ten per cent. In logging or clearing land the tractors travel through the forests without having the roads previously prepared, if only the trees are far enough apart to allow them to pass. On one occasion an engine hauled fifteen thousand feet of logs on two trucks down a seventeen-per-cent grade, the route being over ground from which the underbrush had not been removed.

For freighting there are provided three or four wheel trucks, each of which will carry twelve tons or more. A good-sized traction engine will haul a train of four or five of these trucks, fully loaded, and inasmuch as each truck is fitted with an automatic brake operated by the engineer the outfit is under perfect control on any kind of a hill. The wheels of the trucks are low, so that loads can be taken on or off quickly.

As has been said, these tractors in the form of road and farm engines constitute another Yankee invention that is coming into extensive use in all quarters of the globe. For instance, tractor freighting outfits are in use transporting coffee from the plantations of Nicaragua, Central America, to the seacoast. Numbers of the sixty-horse-power engines are employed in plowing in South Africa, and steam harvesters from American workshops are thrashing grain in Spain and the Argentine Republic.



### Some Insects Scarce

THIS far this year the insects which so often baffle the skill of the gardener are less in evidence than for many years past. It does not always seem to be the most severe winter which kills most insects. Last winter was rather mild, although giving us many violent changes in temperature, yet the potato and cucumber beetles seem to have fared worse than in the coldest winter in the past ten or more years. Very few potato-beetles have survived.

Our storekeepers will hardly sell the usual quantities of paris green, as there seems to be little need for its use. The comparatively few clusters of eggs which the survivors have laid on the under side of the leaves are apparently taken care of by the lady beetles, which are also fond of "eggs for breakfast." Dealers have been boosting the price of paris green to the highest figure in years.

It is therefore with considerable satisfaction that I note the workings of a higher power which puts an effective check on the greed of those who sought to profit by the misfortune of the farmer. I have my arsenate of lead in readiness, but up to this time have had no occasion to use it. I only wish that this exemption would be permanent.

### Arsenate of Lead

So many tell me that it is difficult for them to procure arsenate of lead, or that they do not know where to get it and under what name that it may be well to give again the formula for making it. Acetate of lead (or sugar of lead) can be had at any druggist's. Buy eleven ounces of it. Arsenate of soda (not arsenite) can also be obtained at the drug-store, or the druggist can easily get it for you. Buy four ounces. Dissolve these drugs in a gallon or two of water, and they will form a pasty mass which is arsenate of lead, the substance you want.

When you can get it ready made from a reliable dealer in agricultural supplies, either as arsenate of lead or as gypsine, or under the name disparene, it will be advisable to buy rather than make it from the drugs mentioned. You can use it in such strength that no insect will be able to take a bite out of a leaf to which it has been applied without speedily giving up the ghost. In fact, all common insects which subsist on the foliage of any agricultural crop have not the ghost of a show against the free user of arsenate of lead, and no matter in what strength you use it, the application will not be likely to do the harm to foliage that paris green often does.

### A Good Potato

"Garden Magazine," in discussing the question of "what is a good potato," says:

Most people, I suppose, take it for granted that the best potatoes are the ones that contain the most starch. On the contrary, it is the ones that contain the most gluten, because gluten is an albuminous food, and starch is much cheaper than albumen.

My idea is that when people plant potatoes they know they are not growing meat or other forms of protein. Although this latter is more valuable, commercially, than starch, yet the starch is what we look for in growing potatoes or corn, and the potato having the most starch, is usually the mealiest and, to most persons, therefore, the best.

I like the Early Ohio because it cooks dry and mealy even when scarcely mature, its mealiness showing its large content of starch. This year I have planted Early Ohio both for early and late use. We had this variety on our table during the latter part of last winter right along, and they were nicer and mealier potatoes to eat than when we cooked the Carmans and Rural New Yorkers, or other late sorts. I am now having three early sorts under comparative test, the Early Ohio, the Noroton Beauty (Uncle Gideon's Quick Lunch) and Maule's Eureka. In thrift of plant and size of vine the last mentioned is far ahead. It looks like a good yielder for an apparently early sort. But "the proof of the pudding is in the eating." I am after the potato with the most starch in it.

### Cabbage Enemies

Several readers have asked me how they can get rid of the green fly which infests their cabbage plants, and a still larger number of readers desired information about the maggot that attacks the roots of the cabbage plants, as also turnips, radishes, onions, etc.

With me, green fly is usually much more troublesome in the greenhouse, where it infests all manner of plants, than in open ground. Various remedies may be recommended. Green fly, in open ground, will readily yield to applications of hot

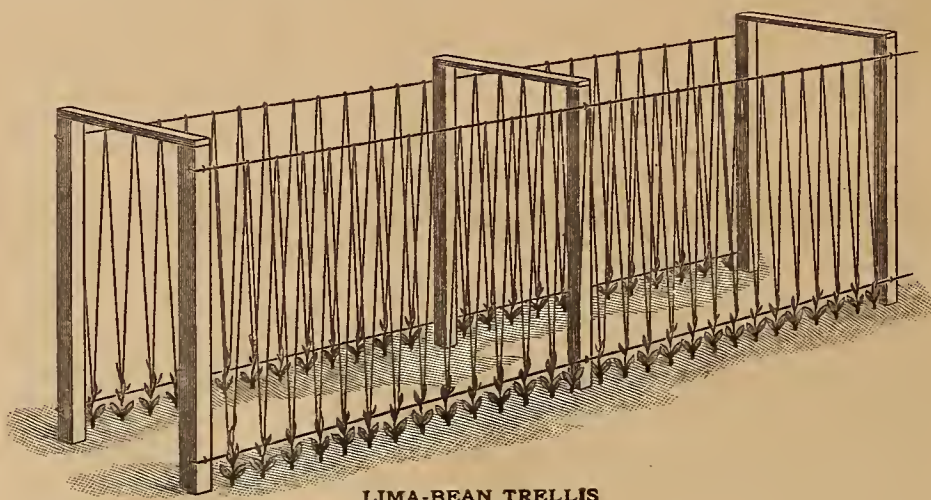
soap-suds, soap solution, tobacco dust and tea, kerosene emulsion, etc. I have this year used whale-oil soap, one pound to seven gallons of water, with excellent success. The liquid is thrown on the infested plants in a forcible spray.

How to prevent the ravages of root maggots is a more difficult problem. We lose some cabbage plants every year by the attacks of this enemy, and often a whole sowing of radishes is made almost worthless from the same cause. The tarred-felt collar, if properly and promptly applied to cabbage and cauliflower plants, offers at least comparative immunity.

This year I have succeeded in saving most of my early cabbages and cauliflowers by the application of whale-oil-soap solution to the heart and stem of each plant in generous quantity, in fact so much that some of it had a chance to soak down along the stem to where the maggots began their destructive work. If the application is made early and often enough I have no doubt most injury by this pest can be prevented. In the case of radishes, they being in a continuous row, it takes quite a lot of material. But it is effort well spent.

### The Lima-Bean Trellis

The scarcity of bean-poles in this locality forces me to resort to other means of giving support to my lima beans. At one time I thought we could get around the difficulty by planting the newer bush limas. The latter, however, have never given me more than a fraction of the crop that I can and do get from my "pole" limas, and now I plant the latter exclusively. They are trained to a post, wire and string trellis, somewhat resembling the Keeney



LIMA-BEAN TRELLIS

trellis shown on page six, in issue of June 15th.

Posts should be set firmly, and not too far apart. I use galvanized wire of fair strength, and find it good for a number of years. It has to stand quite a strain, as the load of thrifty vines is very heavy, and I therefore give as much support, by supplementary stakes (between the posts), as is convenient. The wires are made to rest in a crotch at the upper end of the pole or stake.

To make the trellis still stronger, I now put several rows side by side, and connect the posts and stakes across the rows by cross-strips fastened high enough to allow the horse in cultivating to pass under it.

For each row I stretch two wires, one about six inches above the ground surface, the other about five feet from the ground. Common binder twine is wound zigzag around the two wires. It makes a useful and quite ornamental support for the limas, and the vines take readily, particularly and remarkably so, to the strings, even without much assistance or coaxing on the part of the grower.

### White Grubs in Potato Patch

When you ask me how to destroy the white grubs that attack the potato roots, I must confess that you have me cornered (and every expert that I know of, too). What salt it would be safe to apply to the soil could not have any possible influence upon the grubs. You might as well let things go as they will until after the potatoes are harvested, after that plowing in the fall, and replotting, etc., will probably expose many of the grubs to the weather, to birds and other enemies.

Constant deep stirring of the soil will do more to free the soil of the pest than any application that I know of. The same may be said of the wire-worms, which at times are a great pest in potato patches. A year or two ago we had a large percentage

## Gardening

of our late potatoes so badly worm-eaten that they were hardly marketable. Late fall plowing will help for the future.

### Careful Packing Pays

According to reports the Pioneer Fruit Company, of California, recently sold a car of black cherries in Boston for \$4,308. I do wish that the rot and the birds would once give us a chance to harvest a crop of perfect cherries, such as the growers in California put up. We could sell them easily enough at a good price, even without going far from home, and might get California prices by doing California packing.

### Large Squashes

M. D. R., of Washington, asks about the effect on the main vine of cutting some of the smaller branches off a squash plant. Last year, he says, he planted a few hills, and in one hill there was only one vine with two branches, on each of which he allowed one specimen squash to grow. These two specimens were very large, while other hills had many plants and branches, and bore a lot of very small squashes.

The way to grow large ones is to have only one or two plants in the hill, and then to remove the excessive number of specimens that set. The removal of side branches after the desired number of fruits have set on a plant, and also the clipping of the ends of the branches, is beneficial rather than injurious, provided it is not carried to extremes. Watering with manure water, soap-suds, etc., in a dry time is always to be recommended.

I usually plant my winter squashes in

twigs and smaller limbs that appeared sound and thrifty up to shortly after blooming-time, suddenly began to wilt and then died down, the leaves turning brown.

This is undoubtedly the malignant disease known as "fire-blight" or "pear-blight." It attacks apples, pears, quinces, etc., and at times has been quite destructive. To judge from many reports which I have recently received, I believe this blight is just now prevalent in many sections, North as well as South. We have it in our own vicinity. I see blighted limbs here and there in my own orchard, although the attack does not yet seem to be serious, and by taking "Time by the forelock," and cutting the blighted limbs out promptly and destroying them at once, we expect to keep the disease in check.

"Country Gentleman" describes the manner of its spread as follows:

The cause is a minute bacterial organism known to scientists by the name *Bacillus amylovorus*. The organism or microbe enters the tree through the blossoms or the young and tender growing tips of new shoots. It multiplies rapidly and works its way downward into the branches, which it soon kills, the leaves and blossoms of the affected branch becoming dead and discolored, sometimes brown or more often black or blackish. The destructive work goes on most rapidly in warm, moist weather in the early part of the season, and in such weather minute drops of moisture filled with the organism ooze from the bark and are carried from branch to branch or tree to tree by insects, and the disease is thus spread.

Professor Arthur, then, I believe, of the New York State Experiment Station, gave us all this information about the "pear-blight" as early as 1885 (Grand Rapids, Michigan, American Pomological Society meeting), and advised the prompt removal and destruction of the blighted wood, always cutting a foot or more below the visible exterior signs of the disease.

The only point or suggestion that has ever been added to Professor Arthur's information and prescription is the need of careful disinfection of the knife or saw used in cutting off the diseased limb so as to prevent all danger from reinfection. A sponge moistened in a strong antiseptic (carbolic-acid solution, for instance), should be kept handy by, or suspended from the workman's belt, and the knife or saw thoroughly wiped off with it after every cut.

*A. Greiner*

### Cost of Small Greenhouse

In a recent number of the "Rural New-Yorker," W. T. Taplin outlines the following plan for constructing a cheap greenhouse:

The cheapest form of small greenhouse for growing vegetable plants would be that known as a "lean-to" house, that is, a house with a high back wall and the roof in one slope, instead of having the ordinary double pitch roof that is commonly associated with greenhouses. The cost of such a house would depend very much upon the price of material in the locality, and also the question whether the owner would do the work of construction, or would have to hire labor for that purpose.

A lean-to greenhouse 12 by 15 feet could be built in the Middle States for \$50 to \$75, including the heating apparatus, if the owner does all or nearly all the work, but with the high prices that now prevail for both material and labor this cost may easily be exceeded if all the work is hired; 10 by 15 glass is more often used for this purpose than 10 by 14, as both sizes are found in the same price bracket in the dealers' list, and in small quantities would be likely to cost about \$3.50 per box of fifty square feet, this price applying to second quality or "A" glass, the first grade being now known as "double A."

It is doubtful whether the kitchen range would heat such a greenhouse satisfactorily, and I would suggest the use of a small base-burning boiler, such as is frequently used for laundry purposes, the hot water being conducted from the boiler through six runs of one-and-one-half-inch pipe the full length of the greenhouse, the best arrangement of the piping being to run three flows up the back side of the house and the three returns down the front side, and from there returning to the bottom of the boiler, there being an air vent allowed from the highest point of the piping.

It is preferable that such a greenhouse faces the south, and if the back wall is eight feet high, and the front two and one half feet, it will only be necessary to dig out a path through the center to a depth of about one foot in order to give plenty of head room. There must also be some provision made for ventilation, else the stock would soon suffer in the spring.

the corn-field, on land that is not excessively rich, and I let the vines have their own way, as I aim for medium and small sized winter squashes rather than very large ones. The overgrown specimens are not so salable in our markets as those of medium and below medium size.

### Spraying Celery

Blight has often seriously interfered with our celery crops. Some years ago I found that by spraying the plants frequently with a weak simple solution of copper sulphate without lime (say an ounce to a couple of gallons of water) I could check the spread of the disease, and that spraying the plants in this manner is a good precaution. In "American Agriculturist" I now see an illustration of Mr. Irving C. Smith's homemade sprayer in operating in his celery field. He is quoted as saying:

We have grown celery, more or less, for over thirty years, and never saw blight on it until about five years ago. Now it is almost as necessary to spray for blight as to poison potato-bugs. The cart is made by putting a platform, with rigid thills, on an old axle and wheels which were lying around the place. The thills are set at one side so the horse will not walk on the row. Use heavy pressure on pump.

I intend to spray my celery hereafter either with Bordeaux or with the simple copper-sulphate solution, as regularly as I do my potatoes. For the later treatments I prefer the simple solution, as it does not stain the foliage. Celery leaf is less susceptible to injury by copper sulphate than the leaf of many other plants.

### Fire Blight of Apple and Pear

One of our readers in Virginia sends us a few twigs of an apple tree that, like many others in his vicinity, is afflicted with some sort of blight. Many of the



## Experience with the Golden Mayberry

LOOKING over the seed catalogues I have read glowing accounts of the Golden Mayberry. The catalogues claim that they grow from six to eight feet high and produce rich golden fruit before strawberries ripen. My plants sprawled all over the ground like the dewberry, and were very thorny. Last year the old canes bloomed about the first of June, but did not produce fruit. This year those big thrifty canes are all dead, except an occasional one that was covered with snow, and I have consigned all of them to the trash pile.

Ohio. J. E. WILLETS.

## Time to Set Strawberry Plants in the South

J. D. P., Belzoni, Miss.—Probably the best time for you to set out strawberry runners would be in October or November, or late in February or early in March. When this work is done it is most important to see that only young plants are used. These are easily distinguished from the old ones by their white roots, the roots of the old plants being quite black.

I think it a good plan to burn over strawberry beds immediately after they have stopped bearing. In order to do this successfully the beds should be mowed close to the ground and when the material has dried it should be burned. Then the soil between the rows should be worked up until in a loose condition. The bed should now be allowed to stand until the plants start again, when the rows should be weeded and thinned out.

This treatment is adapted only to old beds that are in good condition; where the old beds are weak it will be impossible to get good results from this method of treatment.

While strawberry beds may be burned over to advantage when the material on them is perfectly dry and the conditions are such that the burning will be very quick and not cause any excessive heat in any one place, yet if the material is somewhat wet, or if it is in piles, the plants will frequently be killed out if burned under these conditions. In the case of long-continued very wet weather I have sometimes had so many weeds and so much mulch on the beds that I have found it impossible to burn all of it, and have carted off a portion and burned the rest.

## Fire-Blight on Apple

J. H., Blue Jacket, Indian Territory—I think the apple twigs that you sent on are infested with ordinary fire-blight. This is a very destructive disease, and is prevalent over a large section of this country. There is practically no way of preventing it—by spraying or otherwise. The best way to avoid it is to plant only those varieties that are resistant to it. We find that in this respect there is a great difference in varieties. Some are exceedingly susceptible, while others scarcely blight at all, and are seldom if ever seriously injured by it.

You do not give the name of the variety of which you send the foliage, and I cannot identify it from the specimen sent on.

I would suggest that you send specimens of this disease to the experiment station, at Stillwater, Okla.

## Plum Aphis

A. W. S., Leesburg, Ind.—The insect which you have described in your letter is plainly the common plum aphis, or plum louse. This insect produces a winged generation, perhaps once or twice each year. It winters over in the egg stage. These consist of little black shiny eggs, which may be readily seen in winter about the buds of apple, plum and other trees. They hatch out in the spring, and often just about this time the air in some places may be almost filled with these flying insects. The summer generations are brought forth alive and asexually, and multiply very fast.

These are sucking insects, and Paris green, London purple and similar poisons which must be taken internally before they can kill are worthless. Kerosene emulsion may sometimes be used to advantage, but where a plum tree is covered with this pest, so that they are several tiers thick on the leaves, the waxy covering of the aphis readily sheds watery liquids, and where the leaves are curled those inside of the curls cannot be easily reached.

In my experience the only satisfactory treatment for plum trees, where they get into this excessively bad condition, is to cover them with a tent and smoke them with tobacco smoke. This is an effective remedy and one treatment will clean the trees thoroughly. To do this I cover the trees with a tent made of cheap unbleached cotton cloth. These tents may be made in various ways, but in my experience

## Fruit Growing

what is known as the hoop tent is the best. This consists of a big bag of cotton cloth, into the end of which is put a hoop made of gas pipe or something that will hold the mouth extended. The hoop is stood up by the side of the tree, and two persons working together push it over the tree and pull it down to the ground.

A smudge of wet tobacco stems is then prepared, preferably in an iron vessel, and care must be taken that it does not blaze up. When smoking well it is put under the tent and left there until the tent is thoroughly filled with tobacco smoke. A little experience will soon show how long to leave it, but generally about five minutes is long enough, and will fill the tent full of smoke. As a result of this the insects will be destroyed, and no further application will be necessary during the season.

## Time to Set Strawberries

E. C. J., New Egypt, N. J.—In the North strawberries are generally planted in the spring by all large growers. This is the time preferred, because success is more general with stock planted at this time. Some growers prefer to plant when the ground is moist in autumn, but plants set in autumn should be well mulched in winter to protect them from heaving out.

As to the method used in setting strawberry plants, some growers use the ordinary transplanter, such as is used for setting tobacco and cabbage plants, and on a large scale it is probably by far the best implement to use. In a small way, however, I think probably a spade is as good as anything for setting out plants. The plants should be dug and trimmed, and the land should be smooth and the rows marked out with a corn-marker or similar implement. To use a spade to best advantage for setting strawberry plants requires two persons, one to push the spade into the ground and bend it back and forth, making a small opening into which the one carrying the plants sets a plant, after separating the roots, and presses the soil against the roots. In pushing the spade into the ground it should be held in a perpendicular position, with the top side toward the operator.

## Nematoids in Peach Roots

H. J. K., Cuero, Tex.—In my opinion the only satisfactory way of preventing nematoids from destroying peach trees in the South is for growers to set their peach trees on land that has never had peaches on it, or at least not for many years, and which does not receive the wash from other land that has had peaches on it for perhaps five or six years, and to plant trees that come from a section entirely free from this trouble.

This disease is one of the most troublesome that the peach grower of the South has to contend with. It is not troublesome where the land freezes deep in winter. Where plants are attacked by this disease it is customary sometimes to apply quick-acting fertilizers, so as to encourage the plant to overcome, to some extent, the injury from the disease. But this treatment is seldom successful in enabling the plants to overcome the disease permanently.

## Ants on Cherry Trees

W. S., Schenectady, N. Y.—I am very sure that the ants do not draw together the leaves of your cherry trees, but think if you will examine them closely you will find that they are curled up by the large leaf aphides or plant lice by which they are infested, and the ants are numerous on the trees in order to get the sweet honey dew that is secreted by the aphids, of which ants are very fond. If there were no lice on the trees I do not think you would have any ants. It is not an easy matter, however, to keep these off. The best treatment is probably spraying early in the spring, as soon as the leaves begin to unfold, with tobacco water made the color of strong tea, or with strong soap-suds made at the rate of an ordinary one-pound cake of soap to fifteen gallons of water. Where the trees are small and the limbs can be easily reached, the most successful way of treating them is to dip the ends of the branches in a basin of insecticide held in the hand.

Where ant-hills are troublesome they can generally be destroyed by the use of bisulphide of carbon. This material is much like gasoline in appearance and in explosiveness. To use it moisten a piece of cotton about the size of an egg with this material, and lay it on top of the ant-hill, and cover with an inverted sod, or

with several thicknesses of newspaper held down tight around the edges with a little carth. The fumes of this material are very destructive to animal life.

## Monthly Rose Injury

W. A. H., Martin, Tenn.—I do not know what is the cause of the injury to the opening buds of your rose that causes the petals to dry up and wither. I am inclined to think that the trouble is that you have a variety of rose that is not well adapted to cultivation in your section, and would suggest that rather than try to rejuvenate this rose that you start with some more vigorous and promising kind.

## Packing Plants

T. K., Perry, Ohio—The best time to ship nursery stock is in the spring. This is especially true for the amateur, as at that time of the year plants can be moved with the greatest certainty. However, in the case of peonies I always prefer to dig the roots and ship them in the autumn, as they seem to do best when transplanted at that time.

It is quite difficult to give you much of an idea as to the best way of packing plants within the space allowed me here. I would suggest, however, that probably the best material for you to pack in is water-soaked excelsior. In doing this make a bundle of your nursery stock, putting the excelsior about half an inch thick between all the roots, then cover the whole bundle fully an inch thick with solid moist excelsior, and tie the whole tightly together. The bundle should then be covered with several thicknesses of brown paper about the roots, and then the whole package covered with burlap—if it is to be sent in a bundle.

If you are going to send by express you can very likely use a light box to good advantage. In this case pack the plants in excelsior as recommended above, making it solid around the roots of the plants, and cover them tightly with excelsior so as to hold them in place in the box, so that they will not rattle about. Then put on a tight board cover. Treated in this way plants may be shipped long distances without injury.

For several years I have sent plants to Alaska to the experiment station. They had previously had much trouble with plants shipped them from the nurseries generally, owing to the long time required in transit and the fact that decay would frequently start before the plants arrived, but packed in excelsior there has been no trouble from this source of injury. Excelsior for this purpose should be packed very firmly into place.

*Samuel B. Green*

## Success in Selling Peaches

At the midwinter meeting of the Michigan State Horticultural Society, there was a member who did most of his talking around the hotel table and in the hall before the meetings opened, and in a few words and as few moments he said more than some of the others who had a paper on the program.

This man was E. B. Payne, owner of the Highland Fruit Farm, in Barry County, Michigan. Payne is one of the men who believe in the special order as a means of disposing of fruit to advantage. His principal crop is peaches, and he has about eight thousand trees of the leading varieties, Elberta prevailing.

In one of the committee meetings a member had told that he knew of a shipper who had sent consignments to twenty-one commission men in Chicago at one shipment. It was related that most of the city sellers sent back to him for funds to pay the freight. Mr. Payne says that last year he attended the state fair, and looked about to see a display of peaches. He took particular notice of the inquiry for this fruit, and made up his mind that he could sell some of his peaches. He wired his son to send him a good-sized shipment. He sold the peaches at the rate of \$3 a bushel. Some of them went to points fifty miles south of St. Louis, on the Iron Mountain road. They went to places where the freight rate made them dear fruit before it reached home. Payne says that he had the fruit, and that it was properly packed, and that was the secret of his success.

He went to other markets, and his experience was repeated. He went to the city market of Detroit and sold one order after another until all that had been sent to him

were reshipped, and to points long distances away. This grower had simply become his own commission merchant. The boys gathered the fruit and packed it and sent it to the father to sell, and he sold it.

Mr. Payne is a sprayer and a mulcher. He sticks to standard formulas in bug and scale killing stuff, and exercises like judgment in thorough treatment of his trees.

Last season Berrien County alone produced 2,000,000 bushels of peaches. It remains to be seen how many counties it will require to produce that many in 1906.

J. L. GRAFF.

## Strawberries

Every tiller of the soil should have a patch of strawberries. There is no fruit which yields so great a return with so little care as a small patch of strawberries. A tenant of land, if he is sure of two years occupancy of the same farm, should grow strawberries.

Besides the fact of being a royal fruit, they add to the happiness of the family. I know of a family whose home-life was not the brightest, and I succeeded in persuading one of the members of the family to plant a bed of strawberries, who has thanked me many times for my suggestion. The "head of the house" has planted other fruits, and instead of being a bear, has begun to be a man, and tries to make home a pleasanter place for his children.

The very best varieties of strawberries are cheap; besides, almost every strawberry grower will gladly give away plants. I have given away thousands of plants.

First get your plants. If you cultivate your garden with horse and plow, which is the best plan, plant your berries in the spring, in a row the whole length of your garden, with plants two feet apart in the row. The length of your garden will determine the number of rows you need. If more than one row is needed, make the rows three and one half feet apart.

When you plow your garden plow your berries. Let them run till they cover the ground. The second year you will have an enormous crop.

Having started, plant a new row every spring, and after picking two crops from your first planting, plow them up and plant some other crop in that place.

Of course one may grow finer and larger berries by keeping them in rows or in hills, but this is an easy way to grow them. Aside from a little time to hoe them the first year, the cost of growing them is almost nothing. There are thousands of farm-homes without home-grown berries, and there is really no excuse for it.

U. S. ELLSWORTH.

## Another "Seedless" Scheme

The Spencer Seedless Apple Co. has taken up a new dodge and assumed a position that cannot be maintained. They have offered for sale the Seedless Sultana grape in the catalogue that is issued from their office in Buffalo, N. Y., and publicly state that it is to cover the northeastern territory, including New York and the New England States. The following is their published statement and offer of cuttings for sale:

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Now the Sultana grape is by no means "new," for it has been known in the Old World for centuries, and been growing in America for many long years. I saw vineyards of it in California about twenty years ago, where it is a most excellent grape. Nor is it suitable to any part of the Eastern States, much less the extreme northeastern part. It is one of the varieties of the Vinifera species, and none of them has succeeded east of the Rocky Mountain divide, except in a portion of western Texas. The price which they ask for cuttings of this grape, \$1 each, is enormous and positively extortionate. They can be had for from \$3 to \$4 per thousand in California, or imported from Turkey or anywhere that the variety is grown in Europe or Asia for about the same price. Rooted plants, which are worth far more than cuttings, can be bought for less than 25 cents each, delivered postpaid to any address, and I would guarantee to see that this is done, but would not advise anyone to plant them east of New Mexico and Utah.

Perhaps these "seedless" people will next offer the Washington Navel orange for sale (because it is seedless), in Illinois and adjacent states, where it would meet the same fate as the Sultana grape in New England. And why not the "seedless watermelon" for Alaska?—H. E. Van Deman in Rural New-Yorker.



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# Poultry Raising

### Nest to Prevent Egg-Eating

FROM Pala, California, a subscriber kindly forwards a design of a nest to prevent hens from eating their eggs. It is one which he has in use, and in describing it he says:

"Take a box large enough for a nest and cut a hole, say three inches in diameter, or large enough for an egg to roll through. Then pad your nest, sloping toward the center, so that when an egg is laid it will roll down into the hole. Take another box of the same width and length, but only about six inches deep. Take a trough of tin, about eight inches long and four inches wide, and shape this so that an egg would roll down it without running out. Then fasten this about two inches below the hole, and with enough slope so that it will roll down into the lower box. Have the lower box fastened onto the upper box by hinges on one end and a hook on the other, so that you can gather the eggs at night. Have the lower box padded, so that when the eggs roll down and strike against each other they will not break.

### The Pure Breeds

The farmers who are careless regarding the kinds of fowls to keep pay well for their indifference. They may content themselves with the belief that "one fowl is as good as another," but they are governed by old customs and usages instead of experience. Compared with common fowls the pure breeds are more useful; they lay more and richer and larger eggs; some varieties come to maturity sooner; they are far more quiet generally; at maturity the cockerels make fine roosters and the pullets good winter layers. Flocks of common kinds noticed on some country places cause loss to their owners, and are a drawback to any farm in these days of progress and improvement.

It costs but little to begin with pure breeds, and in one year the farmer can have a handsome flock of nice, thrifty, useful breeders that will give satisfaction and pay liberally for their keeping. It is for some reason difficult to overcome the prejudices of farmers against pure-bred stock of any kind. Some of them even ridicule those who are progressive, styling them "fancy farmers," but there would be no progress at all if enterprising men did not seek something better year after year. Animals that bring high prices for breeding purposes combine utility and good breeding. There is nothing "fancy" about them. They are bred for a purpose and for profit, and their owners know what to expect from them.

### Distinguishing Pigeons

Some expert breeders of pigeons are sometimes perplexed when attempting to separate the males from the females, and there is no sure method known for distinguishing them, though many breeders and handlers can do so with but few mistakes. In a majority of cases the cocks are thicker and more massive about the head and beak, the male being usually stouter built in every respect. But this is not always the case, and a fully developed, vigorous, stylish hen can be passed off for a cock. Again, the cock makes a louder noise than the hen. When two young birds are hatched the cock is generally the larger, and feathers out the faster. Where the cock and hen are very much alike, as is the case with some varieties, much difficulty is experienced in making selections when unmated birds are to be shipped.

### Summer Green Foods

For fowls in confinement there is no green food superior to alfalfa or clover, and even many young and tender weeds will be accepted. The refuse vegetable tops, small potatoes, chopped grass, or any material that will serve that purpose, will make a cheap and nourishing food for fowls in summer, as they do not demand as much concentrated food during the warm season as in winter. Oats, wheat and bran, with ground meat may be allowed, and any refuse from the vegetable garden will be highly appreciated by the hens. Plenty of grit should be provided with green food, and all waste materials should be utilized. Rape is also excellent for poultry. A poultryman, who made an excellent experiment with rape, sowed the seed early, and when the stalks were about two feet high they were cut with a knife and thrown into the pens for the poultry, the leaves, and even portions of the stalks, being readily consumed. As

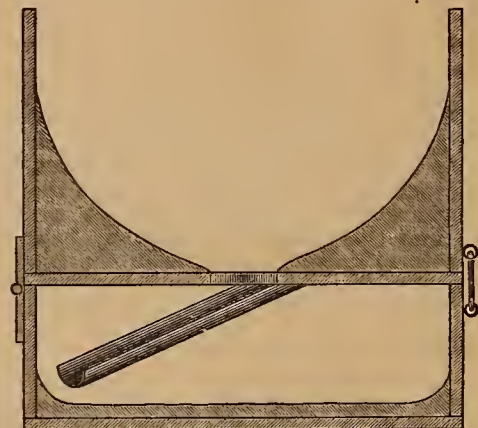
fast as the rape was cut down it grew again, and furnished a supply until late in the fall. Rape belongs to the cabbage family, and it may be described as a large, loose, bushy cabbage. It is tender, succulent, and the fowls accept it greedily. It will be found a valuable acquisition to all who keep poultry. A small patch of rape will supply a large quantity of green food for all kinds of fowls.

### Counting the Losses

On hundreds of farms the chicks are hatched and carefully attended to until they reach a stage of growth at which they are permitted to run at large and take care of themselves. The heaviest losses among all kinds of poultry occur during the summer season, and among the young stock, usually to such extent that less than one half of the infant turkeys and chickens reach maturity, while there is also a heavy loss of ducklings and goslings.

The temptation is to give the chicks the advantage of the warmth of summer, when they can forage and secure a large quantity of seeds, tender grass, etc., as well as worms and bugs. Chicks naturally grow rapidly under favorable circumstances, and the farmer allows them all the opportunities possible, but he is too busy with his crops to devote much time to the feathered tribe until late in the season.

After the summer is gone and the fall comes, if the harvesting is over, the farmer or his wife selects a day for a "round-up" of the young poultry, in order to count them and endeavor to know how many are on hand. It was observed that a large



NEST TO PREVENT EGG-EATING

number of the hens brought off broods, some of them hatching every egg, and several hundreds of chicks came into the world, the losses, if any, during the summer being very few. But the losses of chicks on farms are not always noticed. The dead ones seem to disappear mysteriously, and as the inventory of the feathered stock is usually made when the chicks are small, the losses cannot be estimated or known until the chicks are brought together and counted. The result is about the same on nearly all farms, with the oft-repeated expression, "We hatched twice as many as these; what has become of them?"

The enemies of chicks are more numerous than may be supposed. Rats catch them and take them out of sight. Hawks get their share, while dogs, minks, crows, and even foxes assist in reducing the number. The heaviest loss, however, is due to that miniature tiger—the family cat. Kept on farms to assist in exterminating rats, she can be often found where rats are numerous, as she destroys but few, giving the greater portion of her time to the work of destroying small birds—working industriously both day and night—and she takes the young chicks also. It is true that the family cat will eat from the same dish with the chicks, allow them to roost on her back when she is seemingly asleep, and she will even appear fond of them; nevertheless she knows what she is doing, knows that the chicks have a protector, and she knows enough to disarm all suspicion. When she gets the chance, especially at night, she will seize a chick as eagerly as she will a bird. She is one of the curses of the farm, a destroyer of birds, and really performs no valuable service in comparison with the damage she inflicts.

Hawks do but little harm, though they are considered the most persistent enemies of young poultry, because they can be quickly noticed and detected as soon as they put in an appearance. Owls work mostly at night, when the chicks may not be within their reach. Minks and other animals of the weasel tribe do not venture close to farmhouses unless there is excel-

lent inducement and but few chances of being caught, but they will destroy every fowl on the farm in a single night if not discovered or prevented from so doing. Yet all the enemies of poultry combined do not damage the farmer in the destruction of poultry half as much as the family cat, and this includes the pet of the house that apparently would not kill anything.

One of the causes of loss of chicks is that the farmer abandons them too soon. He provides coops and food, and watches them during all kinds of weather, but when they are well feathered, and are capable of assisting themselves without the aid of the hen, they are then gradually destroyed by their natural enemies. When the chicks have been "weaned" (to use a well-known term) by the hen is the time to more carefully look after them. They may need but little assistance so far as food is concerned, but they should be given a light meal three times a day to induce them to come to a certain feeding place, and they should be placed under shelter, with all openings closed against intruders.

The majority of farmers allow their advanced chicks to find roosting places anywhere, the natural disposition of the chicks being to perch on the highest places they can reach, as a protection against their enemies on the ground, but where they are exposed to the owl, cat and opossum, all of which are partial to young poultry as food. The chicks that do not perish are those that find some place where their enemies cannot reach them.

It is very unprofitable to hatch a large number of chicks with hens only to market one half or one fourth of them. That but few chicks survive to reach the family table or the market need not be mentioned particularly to impress such fact on the farmer, for he knows that every year vindicates the truth of the claim. Why should farmers allow this enormous loss of chicks year after year, which also includes loss of eggs used for hatching, loss of eggs that should have been laid by the hens that incubated the chicks during the broody period, loss of food, and loss of time and labor in caring for the broods during their early stages of growth.

It will pay the farmer to have a place for his chicks at night, especially after the hens have left them, and to see that they are so protected that no enemy can reach them. If possible, they should be induced to forage over clean ground; that is, ground that is free from hiding places of cats and rats, or which has been recently mowed. The young stock should be gotten together and counted at least once a week, and if any are missing the cause should be sought. Never wait until the chicks are nearly grown before endeavoring to learn how many are on hand, or the number that may be missing.

Where incubators and brooders are used the losses are at a minimum, because the chicks are better protected than if with hens, and are more directly under observation, yet the family cat is also the most persistent enemy of the brooder chick, while the brooder system may afford opportunities to the rat; but when a chick dies in the brooder, instead of being carried off by some depredator, the body of the chick is evidence of the loss, but when chicks hatched by hens are turned out to forage and secure their food many of them are never seen again; their gradual disappearance until "counting time" shows that the farmer has remaining but a small proportion of the total number hatched.

### Black and White Minorcas

It is claimed by some breeders that but for the very large comb of the Minorca it would be the most popular breed known. There are two varieties—the Black and White. The eggs are white, and very large. The pullets mature early, and the chicks are hardy. They are non-sitters, a point greatly in their favor with many persons, are splendid foragers, and even in confinement they are disposed to work and scratch. The black fowls have plumage of intense metallic luster, white ear-lobes, coral face, and large, bright, single combs, resembling the Black Spanish in many points. Indeed, the latter breed seems to have sprung from the Minorcas as the result of high breeding, though at the expense of vitality and productiveness. Minorcas are stylish birds, having a very stately, upright carriage, close, compact body, are low on the legs, and are larger than the Leghorns. It is believed that in making selections of the most prolific layers the large combs will be avoided in the future, which will be a great advantage to them, placing them higher up in favor as an excellent breed for the farmer.

*R. H. Jacobs.*



Sheep

THE MATING SEASON.

ON CAREFUL management of the flock in mating season depends a successful lambing season, so a few practical hints to novices and reminders to older hands may not come amiss.

If it is intended that a fresh ram is to be purchased, this should be done some time before the actual "mating" time. And this not only because as a rule the best rams are sold first, but also because it is well to have the ram on hand some little time. All breeds of rams are turned out from the breeders' hands about as perfect to the eye as good feeding and general good management can make them, but perhaps they may not always be in as fit state for their work as they should be. Living on the best of everything that the farm can produce, or the cake merchant can offer, and only needing to exert themselves to the extent of traveling to the feeding trough, does not tend to general activity. Particularly is this the case with the heavier breeds of rams, and many a man has been disappointed with the result at lambing time, namely, a lot of barren ewes. For these reasons rams should be purchased early, and allowed plenty of exercise. And whereas their diet previously has consisted of food calculated to feed, it should be changed gradually to a stimulating one. If this plan be adopted, after about two weeks the ram will be in a much more serviceable condition.

During the time the ram is running with the ewes, he should be allowed a pint per day of split peas or beans, with a few crushed oats. Frequently a ram is put straight to the ewes to go over a large range of land, without any special attention being bestowed on him; at the end of the season, one would not know him for the same sheep, and very often in the case of a Hampshire lamb, he goes wrong during the winter and dies. The fact is lost sight of, in such cases, that whilst in the breeders' hands the best of everything in the shape of food is supplied, and the change to ordinary breeding-flock fare is too sudden.

The small item of expense will be well repaid to the flockmaster in the shape of lusty lambs, and the extra labor of feeding the ram will be made out in the ease he will have in catching him as occasion requires. In a few days, instead of having to go after the ram, he will meet the shepherd as he comes into the field. Presuming the ewes have been properly tailed and trimmed—and this is quite necessary, as well as an improvement to the general appearance of the ewes, and a means of keeping them clean during the winter—the next thing necessary to be attended to is a regular morning or morning and nightly dressing of the breast of the ram with either dry, soft ruddle or ruddle mixed with oil and applied with a brush, so that it is to be known that each ewe is served. At the end of each week, then, all ewes should have a private mark put on them, so that at lambing time the earliest may be drawn off for folding in the lambing yard. I know that in many flocks this is considered unnecessary, the rams running with the ewes a certain time without any sort of record being kept. It has always, however, seemed to me well worth while going to the trouble of marking the ram. It may be well, if it be found that many of the ewes are turning again, to put a fresh ram among them. Again, there is another advantage in having the weekly record of several ewes kept, and to my mind an important one; it does away with the necessity of overcrowding the fold-yard at the lambing season. Let the sanitary arrangements be as good as they may, there is bound to be, among a number of ewes, a certain amount of unhealthiness, and the greater the number the more risks of it.

Prior to and during mating season the ewes require good keep if they are to produce good strong lambs. When they are in lamb, keep is not of so much importance. One word of caution in respect to the shepherd. The time during which the ram is with the ewes, and the early stage of pregnancy are the times when the mischief is done which causes malpresentations at lambing time. Consequently the dog should not be allowed to round up the flock and turn them suddenly; in fact, the dog's services should be almost dispensed with.

W. R. GILBERT.

With the Inspector

A representative of FARM AND FIRESIDE called at the home of the milk inspector of a New England city one morning not long ago, and naturally conversation turned to the subject of clean milk.

"Clean milk is not a question of sight. Milk may look clean and be a poison. Excuse me—just a minute."

The telephone bell rang and the inspector took up the receiver. Then followed half of a telephonic talk between the inspector and some unknown person

Live Stock and Dairy

at the other end of the line. "That's too bad! Where is it? Yes. I remember the place—on the Ridge Road 'bout four miles out. Who are you? Well. It does matter very much. I should know who is telling me this. Can't you give me your name? Oh! Sorry you can't do it. Good-by."

The inspector hung up the receiver and said,

"There is a case of tuberculosis, and I must see the animal at once. My automobile is at the door. Will you join me?"

Five minutes later we were threading our way slowly through the crowded business streets, half an hour later were climbing over the rolling New England hills, passing stony fields, wooded hillsides, and now and then a farm with neat and comfortable houses and barns.

"First we will stop along the way and examine one or two of the smaller dairies just to show you how the business is being made slowly better and better every year—that is, better in a sanitary sense."

We soon entered a lane that led up a steep hill to a little farmhouse. As we drew up the farmer came to the door. He evidently did not know the inspector and, when the inspector began to ask questions, did not seem to take the interview very pleasantly. However, he answered all the questions with apparent readiness and seemed to think it best to appear to be very frank about his whole business. It took only a few moments and then we were off again.

"The man did not seem rejoiced to see you?"

"No. He's a stranger and new to the business. He thinks I am his enemy, whereas I am his best friend. I merely asked him how many cows he keeps, where they are kept, their rations; his pasture and the source of his water supply for washing his cans and cooling his milk. I wanted to know his facilities for preparing his milk for market, its storage and amount, and where he sells it and to whom."

Presently we stopped before a dilapidated old horse-shed near an abandoned roadside tavern and got out to see how nearly the man's statements were true. We looked through the broken window into a dark and not over-clean room where the man had said he bottled his milk.

"Clean milk comes from a clean place. This man is new at the business. He simply don't know. He will change all this or there will be trouble. It is far better that he should do so; better for his own pocket, and he must learn the right way, even if I have to teach him myself. Oh! he will learn—can't help it, public opinion is too strong for him, and some day he will thank me for this visit."

Then on for a mile or more to a big old-fashioned red barn by the wayside. The inspector invaded the barn and looked about. Here conditions were wholly different. There were stalls for about forty cows, and though the place was low and rather dark, it was fairly clean, and the walls and ceiling had been whitewashed. The most objectionable feature of the place was the great pile of manure south of the barn and close to a little brook that flowed into a near-by stream.

"The waste of the manure-heap runs into the brook?"

"Yes, it does—and the stream, some miles below, is used in winter as an ice-pond. Do you wonder that we insist that ice must never under any circumstances be placed in contact with milk? This man knows better than to suffer such conditions. He will attend to them—when he thinks of it. That's the trouble with so many men—they don't think, so public opinion thinks for them—and things grow steadily better."

The inspector led the way across the road to a fine old farmhouse where a row of shining milk-cans glittered in the sunshine. The farmer came out of the house and welcomed us cordially. He seemed to be on the best of terms with the inspector and listened attentively to all he had to say. The inspector took up a tin funnel fitted with brass netting strainers and examined it with the greatest care.

"Look at this strainer. The maker soldered the brass netting to the tin on the inside of the funnel. See that crack on the outside?"

"Sho! That crack ain't bigger than a needle. That crack's on the outside."

"Suppose the milk got in there."

"Taint likely to. Well, as you say, it might once in a great while."

"Yes, and decay there and drop off into the milk."

"Mebby that's so. I'll have that soldered up tight and smooth."

"I would, if I were you. Why, when I had a herd of cows and sold milk in town I took pains to have every can soldered up tight inside and out, and I drove a stylish wagon, looking as clean as a new pin, and I dressed well. It was a big advertisement that my milk was extra clean, and I got a good price for it—eight cents for every quart."

The farmer laughed. "Guess you did. Come and see my cooling-room. I keep it whitewashed and don't allow no dirt in the room."

The inspector approved of everything, except the ceiling.

"What's that leak up there?"

"Oh, I keep a little ice on storage up there. Mebby it does leak a little mite sometimes. I'll clear that ice out right away."

Nothing more was said, and we went on up the hills.

"That man is all right—he means well. He will repair that leak or remove the ice and mend his old strainer. That kind of man pleases me. He recognizes that to sell clean milk he should have a clean place and clean utensils and be clean himself—not alone have clean hands when he milks his cows, but have a clean mind. I wonder if a clean mind isn't a factor in every business—the milk trade not excepted."

"Now here's an ideal place for a farmer's home—and yet—"

He said no more, for we stopped at the front gate of a gem of a New England home, neat, comfortable and attractive. Here we met a cordial reception from the owner. For a while we sat under the trees and spent many pleasant minutes discussing cows, crops and dairy business. Everything was delightful till the inspector took up a milk-can and began to examine it carefully.

"Now, that's all foolishness! That can is clean. I washed it myself."

"Still, bacteria might lodge on the under side of the rim of the can, just where the tin is turned over the wire at the top."

"All this talk about bacteree is foolishness. I never see any around my place."

The subject promised to become irritating, and the inspector led the conversation away to other matters, and soon after we departed and turned back toward the city. Nothing more was said until we slowed down, and turned out upon the grass beside the road.

"Now we will look at that party's cows. The owner had never seen any 'bacteree.' Wonder if—"

The inspector led the way over a stone wall, across a field, over a second wall, and we came to a steep hillside pasture where some cows were grazing down in the valley and completely hidden from the sight of anyone passing along the road.

"There she is."

There could be no doubt about it. Every external sign said "tuberculosis."

"What shall you do about it?"

"Nothing just now. I'll go back to town, call up the state dairy authorities and report the case. This afternoon I will notify the owner that the cow must be isolated and her milk thrown away until the state surgeon examines the cow."

Two days later the cow was safely dead. Perhaps the next day after some poor mother in town began to give her child clean milk—and did not know it. All she knew was that day by day the child began to thrive as never before.

CHARLES BARNARD.

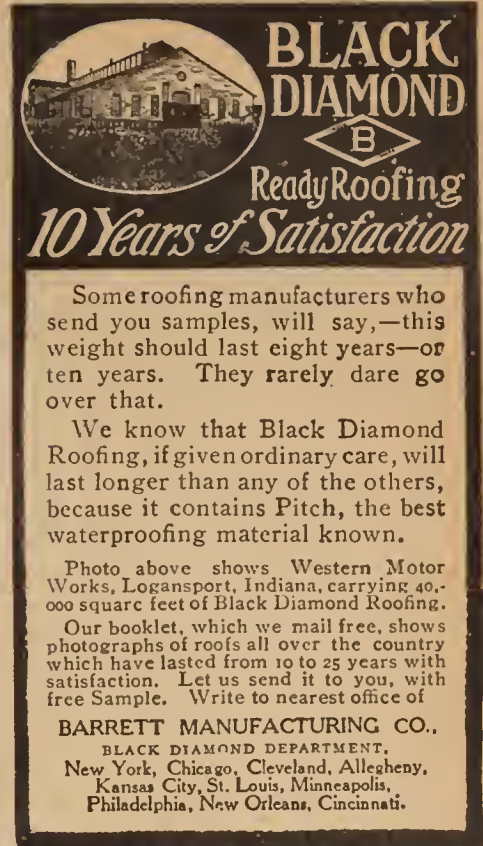
Cow Life

The cow is a creature of the quiet life. Her functions are not those of great muscular activity and hardships. Her mission is to change the fodders and grains of the field into the most refined article of human food. Neither her health nor her product is improved by her being required to do hard labor. Voluntary exercise contributes to her good health, involuntary subtracts from her profits.

W. F. M.

Per Cent of Fat in Milk

Several subscribers of late have asked for the highest authentic record of per cent of fat in milk. Doctor Babcock states that there is on record no analysis of milk which shows more than nine per cent of butter fat when the cow was giving as high or more than fifteen pounds a day. In his own work, he has found the milk of a cow yielding but a small quantity daily to contain as high as ten per cent fat.—Hoard's Dairyman.



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## Dun on Sunday

G. Y. T., Ohio, asks: "Is it against the law to dun a man on Sunday?"

There is no particular offense known to the law in asking a man to pay his bill on Sunday.

## Right of Party Acting as Parent

G. H., Ohio, writes: "A. obtained a boy (whom we will call B.) from a children's home, but did not adopt him. B. earned some money and deposited it in a near-by bank. Could A. have made any arrangements with the banker that would prevent B. from drawing the money without his (A.'s) consent? If so, is the act upon A.'s part legal or illegal? A. and B. are no relation or connection to each other at all."

When A. obtained this boy, he occupied the position of a natural guardian, and as such was no doubt under obligation to educate, clothe, and support the boy. In return for this, he was entitled to the services of the boy, and consequently if the boy earned any wages, he would be entitled to them. If this relation of parent and child has ceased by consent of A. and the boy goes out and earns wages, then it seems to me that the wages are the boy's, and A. has no right to them.

## Exemption from Taxation

C. E. D., Ohio, writes: "There is a family of six children to whom was left the sum of eight hundred dollars by their grandfather. A guardian controls the money. Is each child entitled to a hundred-dollar exemption, under the present tax law?"

Yes, my judgment would be that each individual person is entitled to \$100 exemption.

## Right to Put Water-Trough on Highway

J. T. W., Connecticut, asks: "Have the selectmen, or men working roads in Connecticut, a right to run a trough through a man's fence onto his grounds in order to run water into a trough on the highway, without saying one word to the owner. Can the owner oblige them to remove it, or can he make the town pay for the water, as the water would run down in the gutter side of the road anyway? If the owner raises no objections, and says nothing about it, will the town gain a right to take that water from his land by using it a few years? How many years would it take to gain the right? What must the owner do to preserve his rights?"

I have not the special law of your state in reference to roads, but I will say generally that the road superintendent would not have a right to go onto your ground in any way to get water therefrom for a water-trough, unless that right has in some way been purchased or acquired. If an owner raises no objection, it might in time by prescription gain its right. This would be seventeen years in your state. I think the proper thing for the owner to do to reserve his rights would be to remove the trough.

## Mortgage Barred by Statute of Limitation

A. Z., New York, inquires: "Does a mortgage given as security for the payment on land ever outlaw when no payments have been made on it, or even interest, and if so, when?"

Yes, it would be barred in twenty years.

## Right to Remove Stone Wall, etc., Built on a Highway—Right of Mortgagee to Stop Removal of Improvements

M. B., Ohio, writes: "(1) If I buy a farm and give a mortgage, can the holder of the claim prevent me from taking away a stone wall which has been built for a good many years? (2) Can the township prevent me from taking away this same wall, which has been built on a township road that joins my place, or have I a right to take away some of the ground, providing it does not injure the road?"

(1) The mortgagee would have no right to prevent the mortgagor from removing any improvements on the property, unless he could show that it would seriously affect the mortgage security. (2) No, I do not think the township could prevent the taking away of the wall unless it would in some way injure the roadway. As a general rule the soil of the roadway and all that is thereon belongs to the adjoining landowner, except such as may be needed or used for the highway.

## Holding of Property to Secure Payment of Debt—License, etc.

H. B., Ohio, writes: "(1) A. and wife separate. B. having married a daughter of A.'s wife by former marriage, rents a refrigerator for season of A., promising to return same in full in September. A.'s wife and child go to live with B. and wife, and at the end of season A. speaks to B. about returning the refrigerator. B. says to A., 'You can have it when you pay us

# The Family Lawyer

Legal inquiries, of general interest only, from our regular subscribers will be answered in this department, each in its turn. On account of the large number of questions received, delay in giving printed answers is unavoidable. Querists desiring an immediate answer, or an answer to a question not of general interest, should remit \$1.00, addressed to "Law Department," this office, and get the answer by mail.

for the child's board.' A. did not contract for her board. If B. is in error, please advise what steps to get possession of property, A. and wife not being divorced. (2) Does an agent soliciting orders for goods out of state to be made to order and later delivered, have to pay a license? And should he be arrested, could he afterward sue for damages? I was driven from a small town by the mayor threatening arrest."

(1) A person cannot by having possession of the property of his debtor confiscate the same to his own use in payment of the debt. The law does not work in that way, and the owner of this refrigerator could in a court of law proceed and replevin it, and get possession of it. The creditor would be likewise obliged to proceed as provided by law to collect his debt, and might possibly levy on the refrigerator and have it sold, and the proceeds applied toward the payment of the debt. (2) There is no general state license for agents selling goods. Licenses for that purpose are very often passed by cities and incorporated villages, and are generally held to be valid.

## Charging Interest on Instalments, etc.

J. W. G., New York, asks: "About four years ago I bought a piano on the instalment plan, and now the firm I bought it of want to charge me interest on the same. Can they do so, and if so, how much interest would they be allowed to charge?"

Whether or not you would be chargeable with interest on the instalment depends entirely on your contract. As a general rule, a debt does not bear interest until it is due and payable.

## Right of Widow's Yearly Allowance

C. B. G., New York, asks: "According to the laws of New York, can a widow, whose husband has willed her one thousand dollars in lieu of dower, claim one hundred and fifty dollars besides?"

Yes, she could claim her \$150. It is a claim set aside for the widow's maintenance.

## Payment of Newspaper Subscription

H. E. W., New York, says: "H. E. W. contracted for a tri-weekly paper for one year, and paid for the same in advance. At the end of the year they continued to send the paper. Can they collect the amount due them?"

No, H. E. W. would not be liable for the paper any longer than he contracted to take it.

## Township Trustees Compelled to Build Bridge

J. P. M., Ohio, says: "A. bought a farm with a township ditch located in front of it. The ditch has been there for years, and now he wants the township trustees to put in a bridge for him, where the lane enters the road. Are they compelled to put in the bridge?"

No, I do not believe that the township trustees can be compelled to put in a bridge. If a bridge was needed at this part of the ditch it was the duty of the landowner at the time the ditch was located to put in his claim for damages, and the building and maintenance by him of all needed bridges would be a proper element of damage.

## Change of Names

N. R., Pennsylvania, asks: "Can a first name be changed without going to court?"

Yes, a person might change his first name or even his last name as a general rule without going to court. The statutes usually provide a method for changing name for the purpose of preserving the identity of the person.

## Adjustment of Partition Fences—Costs, etc.

J. C., Ohio, writes: "In October, 1904, A. complains of B.'s fence to township trustees (Section 4243, New Fence Law of Ohio). Two of the trustees go out and view the fence, and find it so nearly completed that they do nothing. Now, in March, 1906, they ask B. to pay one half of \$3. Is B. obliged to pay half? (2) Township trustees serve a fence notice on A. intended for B. The township clerk's attention is called to the mistake, and he issues new notices. Can the trustees charge A. with the one half of one day serving the notices, when the mistake was made?"

(1) I think the statute allows the trustees to collect such necessary fees, as they

were called upon to make the view, and if they had no knowledge that the fence had been built, they were justified in making their view. (2) I do not think that the clerk or trustees should be allowed to make a charge for serving a notice that was wrong. Unless both the trustees and clerk acted in the manner directed by statute they would not be entitled to collect the fees. The matter, however, is small, and probably the easiest way out of it is to pay the fees if the trustees cannot be induced to see that they have made a mistake.

## Note Against a Deceased Person

A. L., Ohio, asks: "When a note is given, and the debtor dies and leaves all his property to his wife during her lifetime, no administrator being appointed, and interest paid before his death, how long will it remain good? What way would be taken to collect it, if his widow is neglectful in the payment of it?"

The proper way to collect indebtedness against a deceased person is to have an administrator appointed for his estate, and whatever property he may have had is liable for his debts, provided the debts are valid or not barred by the statute of limitations. In Ohio a note is not barred until the expiration of fifteen years from the time it becomes due or the last payment made thereon.

## Ownership of Property

J. M. C., Ohio, writes: "I inherited half of a farm from my mother, and the other half my husband and I have bought together, but the deed is all in my name. All he had when I married him was the clothes on his back. I had \$500, and put it in personal property, and we have worked and earned more together. We have no children. If he should die without leaving a will, could his brothers and sisters take anything away from me? Or could he make one? What about a year's support—could I hold anything for that?"

If this property is all in your name, then as a matter of course it is all yours. If your husband should die, that would not change it, neither could he make a will that would in any way affect it. Your year's support would come out of his property, not yours.

## Line Fence

M. K., New Jersey, inquires: "The farmers in this part of the state divide the line fence, each keeping up a section. A. buys a farm, but has no use for a fence on the line of his neighbor's land. Is A. obliged to build or repair a part of the line fence to keep out his neighbor's stock, no agreement having been made to do so?"

The laws at my command do not give me the rule as to fences in New Jersey. Each state has separate statutes to that effect, and I would advise you to consult some local attorney or justice of the peace.

## Inheritance—Pennsylvania

J. R., Pennsylvania, writes: "If a man dies in this state, making no provision for wife, what amount of his estate can she collect, and what amount of personal property can she collect?"

If there are children the wife gets one third of the property. If no children, one half.

## Right to Spring in Highway

B. E. R., Ohio, writes: "I own a farm bounded on one side by the public road. In the gutter on my side is a spring. Have the township trustees a right to take that water to supply a public watering-trough without my consent?"

My judgment would be that the spring in a highway belongs to the adjoining landowner, and that the trustees would have no right to use it for the benefit of the public without the consent of the adjoining owner.

## Is a Box for Rural Mail Delivery a Fixture or Not?

C. B. C., Ohio, writes: "Will you please tell us in the 'Family Lawyer' if the rural mail-box passes with the farm when a farm is sold? Your answer will be interesting to many, as much farm land is changing hands now on rural routes."

This query is a good example of the new questions arising in law, by the changing of our conditions. It is only within recent years that such a thing as a

rural mail-box has come into existence. Whether or not it is a fixture that passes with the farm when it is sold is a question, so far as I know, not decided by the courts. A fixture is personal property attached to the real estate in such a way as to become part of the real estate. It does not always depend upon its manner of attachment, but the intention existing when it was so attached. If it is intended to be permanent, then it might well be said to become a part of the real estate, and would pass with the farm when it is sold. I am of the opinion that if the question would ever get into the courts it would be held that the box is not a fixture to the real estate, and that when the farm is sold it would still belong to the owner of the box.

## Encroachment on Road

V. M., Pennsylvania, wants to know the law on public roads. A. and B. own farms to the public road, B. on one side of the road and A. on the other. B. has the road crowded over on to A., and has set a row of trees within four feet of the center of the public road. The road is a fifty-foot road, and the plat of the road is recorded at the county seat. A. got the county surveyor and the plat of the road, and found the trees in the road. There is no fence on either side of the road. What course must A. take to recover his land and get the road made straight?

I would think that this fence could be removed from the road by having your road superintendent, surveyor, or whatever he might be called, order this road cleared out and opened up to its proper width. The party owning over on the other side should set his fence out to the proper line, and then perhaps the authorities would be compelled to have the road opened as it should be.

## Exemptions, etc.—Sale of Property Unpaid For

J. G., Ohio, writes: "It is claimed in the state of Ohio that a person having no real estate is allowed five hundred dollars of a set-off. On the other hand, if a man owns a homestead he is allowed one thousand dollars. The question is, I give a note for \$130, for six months, for a horse bought at public sale, with security on the note. When due I failed to pay. The security pays it. Now I trade the horse off. I have not paid the note off. Does this come under the same law as selling property under a chattel mortgage?"

No, it does not come under the same law as a chattel mortgage. The note and the horse have no connection with each other.

## Settlement of Estate

L. A. L., Ohio, asks: "A. and B. marry and have six children. B. dies and A. marries again, but had no children by second marriage. A. died six years ago, leaving a farm but no will. The estate has not been settled up yet, but the widow has had a living off the farm since he died. Now a settlement is desired. If one of the heirs buys her dower interest, what part of the chattels could she hold, she having put some of her money in the chattels? What interest in the farm would one of the heirs hold who buys her dower interest, and could he hold it after her death, if in the meantime the remaining heirs had also sold their interest to him?"

When A. died his widow was entitled to a dower interest in his real estate, that is, a life use of one third. She was also entitled to a year's allowance in such sum as the appraisers might give her for her year's support, and she was also entitled to one third absolutely of the proceeds arising from the sale of the chattel property, and she could hold such property as her own. The balance of the property would be equally divided among A.'s children. The widow's dower interest would cease on her death, and if the other heirs had conveyed the property, the purchaser would own the entire estate.

## A Legitimate Person

J. L., Pennsylvania, asks: "A young man and woman were married. In a few months a child was born, and the mother died. Now if the father should die, leaving property and no will, would this child be an heir, or would his premature birth make him illegal?"

Every child born to persons after they are married is presumed to be legitimate and to be the child of such persons. The presumption is so strong that the courts will rarely ever, if ever, allow it to be overcome by testimony. In the above case I would say that there would be no doubt that the child would be legitimate, and entitled to all the rights of the child in the property of either the father or the mother.



## Farming an Intellectual Vocation

UP to the middle of the century just closed agriculture was a handicraft in which methods and implements had changed but little since the first farmer tilled the soil. Men are now living who sowed their grain as did the first sower; who reaped it with such a sickle as Ruth gleaned after in the fields of Boaz, and who thrashed it on such a thrashing-floor as was his.

The advent of modern machinery revolutionized the methods of seeding and harvesting, and enabled the farmer to substitute sinews of steel for those of his body. With the help of such machinery he was enabled to till a larger acreage, and the rapid increase of population and extension of facilities for transportation produced such a demand for his produce as to urge him to the utmost possible production.

Up to our own day virgin soils of practically unlimited area have been awaiting the plow, and it has seemed cheaper to buy new lands than to attempt to maintain the fertility of the old; but we have reached the limit in this direction, and farmers are realizing that future extension of production is to be accomplished only through increase of yield, and that increase of yield can only be attained through a better understanding of the nature of the soil and of the phenomena of growth and reproduction. In short, farmers generally are realizing what educated farmers long have known, namely: That their calling has risen to the plane of an intellectual vocation, and that he who would reap the highest success in this calling must acquaint himself with the elementary principles of natural science.

This realization is now rapidly filling the halls of our colleges of agriculture, but the generation which is now engaged in the active management of the farm has missed the opportunity for the help which the college might have furnished.

After all, however, helpful as college training is, it does not make the man nor the scholar. History is full of the lives of men who have attained the highest success in intellectual pursuits with little or no assistance from the college. In fact, the chief work of the college is not to cram the mind with facts, but to show where and how to find a fact when wanted; to train the youth to discriminate between fact and fallacy, and to teach him how to coordinate facts into effective knowledge.

While this training may be obtained most easily and quickly within college walls, it may also be obtained without college aid, by anyone who has sufficient will-power. The ascertained principles of science which bear directly upon agriculture are being stated in simple and comprehensive form by men who have had that actual experience of the farm which is so essential to the practical application of such principles, and the mastery of these principles is now within the grasp of any farmer who can read and think.

Moreover, there are now agencies, through which suggestion and guidance in home-study may be obtained, by which one may avoid waste of time and effort and concentrate his energies on work which will most directly serve his needs. Such an agency is the educational department of the Ohio State Grange, while "correspondence schools" of a more general character are in operation, through which practical and invaluable advice and suggestion may be obtained. There is, therefore, no longer any excuse for any intelligent farmer remaining in ignorance of the elementary principles of science.

By personal experience I know how difficult it is to force the mind into concentrated effort when the body is weary with a day's hard work, but I also know absolutely that it is possible to him who wills, even under the conditions of the farm, to gradually store the mind with knowledge which may be of incalculable value. To fix in mind a single fact each day would, in a few years, completely change the mental attitude toward the natural phenomena around us; the one indispensable point is that there be a fixed and unalterable determination to conquer at least one such fact each day.

Three suggestions I would offer to the student at home: the first is, do not attempt too much, one thing at a time is enough; the second is, have a book always within easy reach of the spot where you stop to rest after a day's work is done, and the third is, do not wait until the day's work is done, but steal a few minutes—even though it be taken from sleep—to read a few sentences in the morning while the mind is clear and free from fatigue, to be pondered over through the day.

CHAS. E. THORNE,

Director Ohio Experiment Station.

The life of the husbandman—a life fed by the bounty of earth and sweetened by the airs of heaven.—Jerrold.

## The Grange

### Public Inspection

The Committee on Agriculture sneered, Chairman Wadsworth wrote an insulting and defiant letter to the president against meat inspection, the people were paralyzed over the outlook, and knew not which way to turn for relief. It was evident that Congress would adjourn, contenting itself with high-sounding phrases and leaving a bill in the hands of an unfriendly committee, never to see the light of day. "Congress has legislated quite enough for the people," was the sneering comment in hotels and committee rooms.

One bright morning every newspaper of consequence published telegrams from the masters of various state granges, urging the enactment of an adequate inspection law. Chairman Wadsworth and his committee sat up and began to take notice. Result, the meat-inspection bill was reported favorably from a committee decidedly unfavorable.

"The farmers of Washington endorse what has been done by the president," wired State Master Kegley, "and will endorse thorough governmental investigation without fear or favor, to the end that the packing industry may be placed beyond question as to sanitary conditions. Personally I believe that all public industries where food is prepared for general consumption should be under rigid governmental supervision and control."

### Meat-Inspection Law

It was expected that the farmers would respond to the appeal to self-interest made by the packers, and work against an adequate meat-inspection bill. On the contrary, there is no industry more ardently clamoring for genuine inspection that will give confidence at home and abroad than farming.

Ever since the Spanish-American War the stench has been going up from Packingtown. It was left to Upton Sinclair to make explicit what was implicit, and to focus the minds of the people on the horrible conditions. It is a hopeful sign that men were as much appalled by the conditions under which the laborers worked as by the horrid condition of the meats sold. "The Jungle" will likely rank with "Uncle Tom's Cabin" as an economic factor.

The grange demands adequate inspection and decent conditions for the laborers, together with compensation that will raise them above the conditions of beasts, and make possible the development of those finer qualities with which every man is endowed, the dwarfing of which fills our jails, penitentiaries, alms-houses and asylums with a great mass of unfortunates.

### Railway-Rate Legislation

Those who delight in recalling the mistakes of the grange in its first inception and early growth would not find much to their liking in reading the history of the struggle of the early days in the light of recent events. Go to old files of newspapers and magazines, in any large library and look up all that you can find relative to the grange. Read the vituperation and ridicule heaped on these enthusiasts who saw conditions and were ready to change them for juster ones. Read the then current history, and in the light of the enemies' hate you will find cause for loyally supporting the grange.

For nearly a third of a century it has stood for precisely what the people are clamoring for to-day. It stood for juster transportation rates and the rights of the people. Its leaders were ridiculed and maligned, but to-day, in the light of history, they stand as glorious martyrs. Even the testimony of enemies praises them. The present law is a step in the right direction, even though it is far from just.

The grange has lived to see the principles for which it stood upheld by the best societies in the land. It will see the other principles for which it to-day stands accepted as just.

### Denatured Alcohol

No legislative victory of the past twenty-five years can compare in importance with that removing the tax on alcohol. With all the power of the strongest corporation behind it, a corporation that has grown to believe it is synonymous with the government, this source of light and fuel has been placed at the disposal of the people after January 1, 1907.

This means more than an increased market for farmers and cheaper light and fuel for the entire people. Philosophers

would count that but incidental. It means the awakening of a great and conservative mass of voters that they have rights if they will take them; that by ignoring these rights they bring hardship not only on themselves, but humanity; that one cannot suffer without all suffering. As an economic factor, aside from the mere incident of cheap and safe light and fuel, the same power that made this possible can control it. No doubt manufacturers, in the mad rush for wealth, will forget the debt they owe the people in winning this victory, and will follow the road of plunder. The people will not forget, and they will learn yet more their power. They will hedge free alcohol about with government control, and if the best interests of all the people demand it, will place it in the hands of the government.

The days of tamely submitting to plunder are numbered. Ruskin aptly compares the modern robbery of the many by the few to the man with the bag versus the man behind the crag. The man behind the crag waylaid his victims and relieved them of their possessions. The man with the bag follows a less spectacular but even more certain method, for he robs them before the wealth has passed into their hands.

### Educational Needs

Prof. J. M. Greenwood, Superintendent of the Kansas City Schools, in an address before the State Teachers' Association, said that of the 17,000 teachers of the state, 4,000 were without training, "green and unskilled bunglers."

No school system can be regarded as efficient, strong and progressive in which one fifth of the entire body is raw, untrained, undisciplined and ignorant. Instead of having five state normal schools, Missouri ought to have a dozen at this time in full operation. We need trained teachers and we need them badly. They are needed in every state in the American Union, and the only way to get them is to establish and maintain a system of normal schools, sufficient in number to supply the demand of all the public schools in the state. The normal schools are the only schools in which the history, the philosophy, the theory and practice of education can be taught to any considerable number of young men and women, and they are the only schools, par excellence, in which subjects are studied and expounded in the light of how they ought to be presented to minds more immature than those who are participating in the different branches of study.

College and university graduates in nearly every instance, unless they had learned to teach before they entered upon their academic studies, have to be taught how to teach boys and girls in both the elementary and high-school classes. They sometimes know the subject-matter fairly well, but they do not know how to organize it and how to present it, and, worse still, most of them have such poor aim that they miss the capital points in a recitation or in a subject.

Until Missouri can turn out good enough trained graduates each year to fill the vacancies that occur in the teaching force of the state, our system of public schools will never be able to give value received in instruction for the money expended. All the most enlightened nations of the earth demand and require, and furthermore they provide, that thoroughly educated and technically trained teachers shall be employed, and only such as have been equipped, shall teach the children. It is the only way to prevent waste, dissipation of mental effort, and extravagance in the expenditure of public money, not to speak of the deleterious effects upon the children whose ideas, thoughts, characters and conduct are to be shaped into proper ideals concerning all the vital questions of life's duties, its relations and responsibilities.

Superintendent Greenwood was no less emphatic as to the needs of a close and effective system of county supervision.

One of the strangest species of intellectual aberration on necessary school legislation has been the antagonistic attitude of legislators against country-school supervision. Every vital interest is hedged in with inspectors and supervisors, public and private.

When the Supreme Court got behind with its docket, the Appellate Court was organized, because relief and progress were both demanded, and the entire legal fraternity of the state stood behind the movement. The railroads, insurance companies, the banking system, the mines, labor in all its forms, and justly, required supervision, and every right-

minded man said "Amcn." But in the matter of school supervision there has been positive refusal to give the child the uplift that can come only through a wise, progressive and effective system of county supervision. The country needs volcanic action on this subject now. Her school system can never be good, strong and wholesome till it is properly put together and supervised. As a people we apply common sense to every other kind of public work but that of the country schools. Anomalous as it is, they are left to run themselves with a stupidity and a recklessness subversive of every principle of economy and efficiency. If our legislators ever get so that a majority in both houses can see, or do see, beyond their noses, we shall have supervision. In the ultimate analysis I ascribe the present deplorable condition in this state to the absence of the conception that it is the duty of the state to provide liberally for the social and moral uplifting of its children, but the circuit in the legislators' mode of thinking has never been made.

### Need of Physical Education in the Country

Carl L. Schrader, instructor in gymnastics at Harvard, makes a plea for the introduction of physical education in our country schools.

Physical education has been confined to the city, believing that the conditions warranted educating the muscles till physical exercise would become a delight, but that the activity of the country child was assured.

He pays a high tribute to the strong, well-knit bodies and the ruddy complexions of the country college students. But there is a difference in appearance between the country and the city youth aside from this superiority of physique, "but above all, and without fail they may be sized up by their physical habits, such as slouchy walk, poor carriage, awkward movements, backwardness; in brief, they carry the stamp of a physically uneducated being."

This is not so apparent near a village or city. Why is there such a striking difference between the city and country youth, and the country youth near a large village and one far from it? In the city there is opportunity for observing what others do, wear, say. The parents have had physical training which enables them to correct the habits of their children. The primary need of physical education is not to develop muscle, but to educate it into graceful and healthful activity. The military training in Germany takes the awkward youth and in two years he is a vastly different man, with a polish which obliterates every undesirable awkward stamp.

This training will fall on the country teacher who is already heavily burdened, but the change will be a relief. The normal schools will train the teacher for these physical-culture exercises. The value of the development of the sense of beauty cannot be overestimated, and no object lends itself more fittingly than the body. The exercises must appeal to the artistic sense. A beautiful position or exercise may not be very complex. The simplest exercise performed with grace and precision, in a way becomes an artistic production, and grows more so as the body rounds into good form. Any exercise which is ungainly should be discarded. We have sufficient exercises that develop grace and beauty. The acquired power must be controlled. Self-confidence, courage, prompt action are fostered by the use of games.

### The Observatory

Argue as we will, we cannot get away from the fact that the essentials to a successful career are the same to-day they have been for ten thousand years—honor, integrity, alertness, thrift, frugality, shrewdness, preparedness for life's duties.

Following the example set by the Southern Cotton-growers' Association, the Georgia Peach-growers' Association have now adopted a plan for marketing this season's crop. By it, the glutting of the markets will be measurably prevented as the distribution will be safeguarded by an expert manager. The main office is located in Atlanta.

The Minnesota Experiment Station, in connection with the U. S. Department of Agriculture, has by careful experimenting produced an early-maturing and very prolific variety of flaxseed. It is known as No. 25, and yields one fourth more than the common varieties. A yield of three bushels more per acre, at the present price of \$1.16 per bushel, is a paying proposition.

Mary E. Lee.



# A Bit of Gossip

BY J. L. HARBOUR

WHEN the farmers' wives in the neighborhood of Dalton and the people in the little country village heard the clang of a cracked old hand-bell and afterward the shrill, quavering notes of a cracked old voice singing some such cheerful ditty as,

I had an old cow,  
And my cow loved me,  
And I milked my cow  
Under a green bay tree,

they smiled and said, "Uncle Peter Pillsberry is coming."

The notes of his songs grew shriller and more strident as Uncle Peter drew near in his rickety old fish-cart, with its canvas covering, on the sides of which was printed:

"Mr. Peter E. Pillsberry, Dealer in Fish, Oysters, Clams and Other Notions. No Trust."

Although the "no trust" part of the sign had been made emphatic by being underscored, Uncle Peter did trust anybody and everybody in such a perfectly reckless and guilelessly confiding manner that it was a wonder his bank account was half so large as it was. Indeed, Uncle Peter had such a snug sum in the bank that it was not necessary for him to pursue his occupation of peddling fish, clams, oysters and "other notions," as he did, exposing himself to the heat of summer and the storms of winter.

"Ye think I hadn't ought to do so no more, do ye?" he often said to friendly patrons who, with the freedom of lifelong acquaintance, asked him why he did not give up his occupation and "take it easy" the rest of his days. "Ye reckon now that I would set 'round doin' nothin'?" Uncle Peter would ask. "No, sir! That ain't the Pillsberry style. I'd be mizzable killin' time, and peddlin' suits me. It's nice, healthy, open-air work. Then I like to git 'round and see the folks. I allus was great on soshiability, and peddlin' is such a soshiable bizness. Why, bless ye, I know ev'ry man, woman and child in this county, and they all know me. How would you all git along if I left off peddlin'?"

"We would miss you, Uncle," his patrons would say heartily and kindly. "We are always real glad to see you."

The old man would smile like a pleased child and say:

"I reckon ye would miss me. Where would you git your nice fresh haddock and mack'el and hallybut and big fat clams, to say nothin' of the little-necks and the isters, if Uncle Peter stopped peddlin'? You'd have to go clean to Smithfield, nine miles away, fer 'em, that's what you'd do. But I ain't callatin' on givin' up peddlin', although 'Rindy and Becky and the rest of my children want me to give it up and go to keepin' a little store."

"That would be easier for you, wouldn't it, Uncle Peter?"

"Nary time it wouldn't. Store-keepin' never would suit me. It'd just natchelly wear me all out to be putterin' 'round a little store all the time. But 'Rindy and Becky and the rest of 'em they think it would be more genteeler than peddlin' fish; that's the idee with them. It's kind o' gallin' to Becky in pertickler to have her old dad peddlin' fish, and smellin' of 'em when she has comp'ny, though I allus try to keep out o' the way then. Fish do smell, I allow, and the smell sticks to one closer nor a brother."

Uncle Peter's wife had been dead several years. His daughter Dorinda, a spinster of thirty-three years, and Becky, a younger daughter, kept house for him in the old home. Becky had had the advantage, or disadvantage, of attending a would-be fashionable boarding-school for a year, where she had early learned that the society to which she aspired could never tolerate the daughter of a fish-peddling father, notwithstanding the fact that that father was one of the kindest and most honorable of men, and Becky had come home determined to bring her father's fish-peddling career to an end.

At first Uncle Peter had simply laughed at Becky, hiding the pain he felt behind an ever-smiling and kindly face. It cut him to the quick to feel that Becky had come home ashamed of him after all his years of labor and sacrifice for her, but he held his peace, for he abhorred wrangling in a home.

Dorinda had an idea that a store might prove more profitable than a fish-and-oyster wagon, and she was too thrifty to allow any opportunity of increasing her father's bank account to pass unimproved. She looked forward with close calculation to the time when she and her sister and

two brothers would share that bank account, and she wanted it to be just as large as possible. His other children also had their eyes on their father's possessions, which aggregated several thousands of dollars. They had even suggested to Uncle Peter the wisdom and the propriety of dividing his property among them and allowing them to "take care of him" in return. But Uncle Peter was a wiser and firmer man than he seemed. He had a strong, immovable will when put to the test, notwithstanding his childish manner, and his smooth, round, effeminate face and voice. He met the suggestion of his grasping children with a smile and dismissed it with a joke, but there was a look in his faded blue eyes that forbade a recurrence of the subject. He came home from his rounds one day in the merriest mood. He had "cleaned out" his entire stock in trade, and his cracked old voice sang "Annie Laurie" in an excruciating manner as he drove up the long lane leading to the house. At the gate he met Harriet Gibbons, a woman from the near-by village, to whom a fresh bit of gossip was as a sweet morsel under the tongue. She was one of the few persons he knew for whom Uncle Peter felt real aversion, but he had never given voice to his dislike,

some of the others to speak, said almost fiercely,

"Yes, you have pa. Or you are going to do something none of us like, if all reports are true."

"Ye don't say!" said Uncle Peter, the smile still on his kindly face. "Well, what is it? Out with it, and see if your pa kin clear his skirts of it. It must be something heenyous the way you all act!"

Dorinda came out with it flatly and explosively.

"It's the talk of the village and the whole neighborhood that you are going to marry the Widder Newton! Ain't that enough to make us all worked up?"

Uncle Peter dropped into his old splint-bottomed rocking-chair, his arms hanging limply by his side, and an expression of wide-eyed, open-mouthed and gasping amazement on his round, rosy face. His whole manner was proof of his innocence of the charge preferred against him. Indeed, he had never thought of such a matrimonial consummation. His lips parted once or twice before he could say,

"Wh-h-a-t? Me? You say that—" He stared blankly at his accusers as they stood before him. "Me—Peter Palfrey Pillsberry—a goin' to marry Calisty Newton? Well, sich a time and nobody to it!"



"Calisty, you heard the yarns that's goin' 'round about us?"

being a wise man, and now he bobbed his head to and fro and greeted her with a cheery,

"How-dee-do, Mis' Gibbons? Folks all well to home? They be? That's good. Can't ye stay to tea? It must be about ready."

Mrs. Gibbons declined the invitation a little stiffly, and went on her way. When Uncle Peter went into the house he noted an unusually severe look on Dorinda's always grim face, while Becky gave him a reproachful glance. His son William, who lived in the village, happened to come in a moment later, and was soon followed by Uncle Peter's married daughter, Mrs. Gibson Downing. Uncle Peter heard them whispering together as he stepped toward his own little room. He noted a peculiar coldness toward him on the part of all of them, and he stopped at the door and said,

"What's goin' on here that makes all of you act so? Your old pa hurt your feelin's in some way?"

Dorinda, after waiting a moment for

He threw back his head and laughed almost hysterically.

"It's in everybody's mouth," said Mrs. Gibson Downing. "They say you stop at her home half an hour at a time ev'ry day!"

"The idea of it!" said Dorinda sharply.

"Oh, pa!" said Becky.

The son said nothing, but looked vol-

umes. "Easy, now, youngsters, easy," said Peter. "Don't holler 'fore you're hurt. Mis' Newton ain't no more idee of marryin' me than I have of marryin' her, and I ain't never thought of such a thing. I ain't talked marriage talk to Calisty Newton nor to no other woman on top o' the earth but your dead and gone ma, and she ain't on top of the earth now. This is some of Harriet Gibbons' doin's—the old skeezicks!"

The fears of his children were at once allayed, for they knew their father to be an absolutely truthful man. Their faces brightened as he rose and turned to leave

the room, and they did not mind it very much when he stopped at the door of his own room and said with unwonted sternness, while he held his gray head high,

"But don't you try to dictate to me, children, don't you ever try that. If you do you'll find yourselves set in your proper places. Keep it in mind!"

The injured look left his face soon after he reached the stable, and he began the work of rubbing down his old horse. He had a way of talking to the faithful old nag while he worked around her, and now he said with a chuckle,

"Me marry Calisty Newton! What you think of that, old hoss? I just know it was old Hat Gibbons who started that lyin' rumor. I hope it won't git to Calisty and plague her none. The idee of her marryin' me, even if I asked her to! I bet she'd take the broomstick to me if I mentioned such a thing. Yes, and she ought to! The idee of Hat Gibbons puttin' sich a tale as that in motion! I'll be 'shamed to go to Calisty's house to sell my fish any more!"

The Widow Newton was at that moment greatly perplexed and dismayed. She was a neat, comely woman of sixty-odd years, and she lived alone in a cozy little old brown house with a few acres of ground around it. Her four married sons and daughters lived in homes of their own near by. Each of them had urged their mother to "break up" and make her home with her children, but she had steadily refused to do this, although she was a gentle, yielding woman in most things.

"I want a home of my own," she would say. "I have been mistress of a home, such as 'tis, for years, and I'd never be satisfied to have a home someone else was mistress of. Here I can do as I please, and there's no one to find fault or say me nay. If I want batter-cakes or riz biscuits for tea I have them, and if I want to turn to and make up a batch of pies or a lot of sweet pickle I'm free to do it, and there's no one to say it wouldn't be convenient for me to do it. It wouldn't be easy for me to fall into my children's way of living, which ain't my way. And the older I grow the plainer I see that the very best place for old folks is a home of their own. The dear old gran'ma in the home sounds real well in print, but the best place for the dear old gran'ma is a home of her own. It's lonesome sometimes, I'll allow, but there's worse feelin's than lonesomeness. Being in the way in somebody else's house is one of them. I've got enough to live decently on in my own little home, and here I'd better stay."

When her husband died, three years before the time our story opens, he had left his wife his entire possessions with the exception of small bequests to each of his children, who had felt themselves aggrieved thereby, although all of them were in the most comfortable circumstances.

Mrs. Newton was sitting by her favorite window in her favorite rocking-chair, sewing carpet-rags when her daughter, Mrs. Lucinda Evans, came in somewhat hurriedly, and she was soon followed by another daughter, Mrs. Betty Higgins, who manifested a good deal of perturbation of spirit.

"La, girls!" said their mother, "I'd no idee of seeing either of you on Monday, and it your regular wash-day. Set down, both of you."

"I ain't time," replied Betty coldly, and then she added harshly, "You know, mother, that I never was one to beat around the bush, and I'll tell you flat out that what I come for is to ask if there's any truth in this story about you and old Peter Pillsberry!"

"That's what I come for," said Lucinda Evans. "I stopped at brother Henry's house, and sister Hetty is there and they are waiting for me to come back and tell them what you say. Is it true, ma, that you are thinking of marrying old Peter Pillsberry?"

Mrs. Newton gave a shrill little scream and threw up both hands while the ball of carpet-rags she was winding fell from her hands and rolled across the room, leaving a trail of green and red and blue behind it.

"Cindy Evans!" cried Mrs. Newton, "what are you and Betty talking about? Be you crazy? Am I going to marry Peter Pillsberry? The land of the living!"

She threw her green-and-white checked gingham apron over her head and began to rock to and fro, half crying and half laughing. With her apron still over her head she suddenly cried out sharply,

"Go home, girls; go home, and stop and tell Hetty and Henry that I ain't going



to marry no one till I've been asked, and I ain't been asked yet! And far as I know, no one has the faintest idee of asking me!"

She fell to laughing hysterically, and Betty said sharply,

"Well, I'm glad there ain't any truth in it. If there was I think us children would have a perfect right to interfere."

"Yes, and speshly if it was old Peter Pillsberry," said Lucinda. "The old—"

Mrs. Newton's slippered foot stamped the rag carpet under it as she said with unwonted severity,

"You hush right up about Uncle Peter, 'Cindy Evans! He's as good and honest a man as ever lived, and no one was kinder to your father during his long, last sickness than Uncle Peter was. But you can set your minds at rest about him being your stepfather. So far as I know he ain't the remotest thought of wanting to fill that place. The idee of it!"

The girls went home with their fears allayed and in serene confidence that their shares of the four thousand dollars their mother had in the savings bank would not be lessened by the possible claims of a stepfather.

The smile on Uncle Peter's face deepened the next day as he drew near the Widow Newton's place while making his daily rounds. He stopped singing,

Here we are but straying pilgrims,  
and began on a lively ditty about

A lady fair,  
With nut-brown hair,  
Oh, tummy yi yum,  
Oh, tummy I dee,  
Yi yum di dee do!

The Widow Newton heard him coming and blushes came to her plump cheeks.

"I shan't let on that I've heard a thing about the scand'lous mess o' stuff about him and me," she said, as the sound of the rattling cart-wheels came nearer and nearer. "I'll just go out and ask him how the folks are home and get me a pound of haddock and come right into the house, so the tongues of the gossips won't have anything to wag about. There he is at the gate! What's he hitching his horse for? He's coming in, too! If that ain't just queer! If that old Hat Gibbons hears of this she'll—he's rapping on the door! Dear, dear!"

She opened the door and Uncle Peter said cheerily,

"Good morning, Calisty."

He stepped into the cozy and spotlessly tidy little kitchen and stood there with his old hat in his hand and a beaming smile on his rosy face. He had known the plump little woman before him all his life. He had carried her to school on his hand-sled when they were children, and he had always called her Calisty. But somehow she blushed when he called her by her first name to-day. He went on calmly and to the point,

"Calisty, you heard the yarns that's goin' round about us?"

"I—I—yes, I have, Peter."

She turned her burning face from him, fingering her apron corners in her confusion.

"Did it make you mad when you heard 'em, Calisty?"

"I—I—didn't like it, Peter."

"I reckon not, not at first, nohow. I was mad as a wet hen when I first heard 'em, but—but—well, now, Calisty, to own up fair and square, I was real glad in the end; yes, sir, I jist was. Air you mad now as you was at first?"

"I—I—hardly know, Peter."

"I ain't—not by a long shot, Calisty."

"They wa'n't true, nohow, Peter."

"No, they wa'n't, Calisty. There wa'n't a word o' truth in 'em, but—Calisty—dear."

He came nearer and caught one of her hands in his while he said eagerly.

"Let's make 'em true, Calisty. From bein' mad at first I've come to wishin' and hopin'—yes, and even prayin' that they might be made true. Calisty, I want a home of my own once more, and you want to stay in your own home, for you've told me so. Nobody on earth has the right to interfere if we choose to make old Hat Gibbons' story-tellin' true. Calisty—dear—I—"

He had one arm around her trim waist now, and she was half crying and half laughing. The end of it all was that Uncle Peter went on his way singing about the "lady fair" in louder and shriller but joyfully triumphant notes, while the "lady fair" he had in mind went about her work in the clean and sunny little kitchen humming an old love tune forgotten for years.

They kept their secret well, and the next week they met in a neighboring home and rode home together in the brand-new and shining phaeton Uncle Peter had given Calisty for a wedding-gift.

"Of course our children will make a good deal of a fuss," said Uncle Peter, as they neared their own home, "but let 'em.

All earthly and divine law is on our side, and we'll just keep ca'm no matter what the children say or do. We owe 'em a lot anyhow, for it was them that first put the idee of our gittin' married into our heads. Mebbe if they hadn't raised such a fuss we never would of been what we air at this minute, the happiest old bride and bridegroom in the world, ain't that so—dearie?"

He kissed one of her rosy cheeks and she said complacently,

"Yes, Peter."

## The Rose or the Jewel

BY JOHN BARB

NORMAN GESSLER was an energetic fellow, brimful of good humor, with a glib tongue that made him always entertaining. Art was his ambition, and his call at the home of Dasa Finney this particular evening was to say that the picture which he had been earnestly at work upon for the past several weeks was finished, and that it would go to the Royal Academy on the morrow for critical inspection of the experts. "If I have fair play," enthusiastically said Norman, "success will surely come, and it means so much to me." He had never spoken clearly to Dasa. He was without an over-supply of money and she had none beyond that which she earned as a vocalist.

"I do so want to see the picture before it goes to the academy. Can't I?"

"You shall see it in the academy or not at all," said Norman.

The next day Norman Gessler came to the fair Miss Finney, with the glad news that his picture had been accepted. He was in doubt, though, as to whether it would be hung, as he stated "more are accepted than there are places in which to place them. Some come back; mine may. It is a large canvas and I am almost afraid to hope. If it be hung, you know what it means to me—and you," he ventured. "Let's see, Will York is on the hanging committee, and perhaps it is useless for me to hope," he sighed.

"Why, Norman Gessler!" cried Dasa Finney, "you do Will great injustice. Why, you were his pupil; he was kind to you."

"Yes, I know all that, but are you blind, so blind that you do not see that he loves you?"

"Will—love me? You have no right to say it."

"It is not question of right, now," said Norman. "I have been a fool; he is on the committee. He is in love with you, no doubt about it. Do you see the position?"

"I repeat," said Dasa, "you do Will York great injustice; he is an honest man; there is no room in his soul for any meanness whatever."

"What is the title of your picture, Norman? Seemingly you have withheld it from me."

"Yes, perhaps I have. You may know now, though. It is called 'The Decision.'"

The academy was filled by a well-dressed crowd of lovers of art, all busily engaged in drinking in the beauties of the new subjects hung, or taking an acute interest in each other's frocks. Norman Gessler was in high glee. His picture had not only been accepted, but hung. His step was light and airy as he and Miss Finney stepped into the academy. Norman was ambitious that Dasa see his work for the first time alone, and she did. Previously, she had promised Norman to take tea with him later. "This is my day," proudly spoke Norman, "and I want you to crown it. I am invulnerable to fate to-day."

Norman's picture was a large one, representing a sweet-faced girl, looking down upon two men, who knelt, each holding up gifts to her upon cushions of velvet. On the white cushion of the young man rested a single blood-red rose, while on the purple cushion of the elder or middle-aged man was offered a casket of jewels. The medieval costuming of the two men in the picture did not disguise the meaning to her of Norman's work. The whole was beautifully done and the likenesses faint enough to escape general notice. Dasa was eagerly viewing the great canvas, when she was astonished by a remark from behind: "Gessler has done quite a good work, has he not?" It was Will York's voice. "Norman has made good progress, I wish him well. Glad he has had fair play," Will continued, with a smile, for Dasa had hinted to him the evening previous that Norman was fearful lest he should not receive the same at the hands of the hanging committee.

"Please show me your picture," Dasa requested.

"I am not exhibiting."

"Why, you told me you were sending one."

"Oh, it was a simple landscape, and I

decided at the last moment to send it instead to one of the galleries."

"Oh, by the way," said York, "I want to tell you that I go abroad to-morrow. It is a little sudden, but two urgent commissions hasten my leaving, but I must be going now. I shall be glad to see you and say farewell at an early hour this evening, if you say so."

"You may come immediately after tea. As soon after as you will."

Norman Gessler had just taken his departure from the Finney homestead when Will York drove up to the curb. York had seen Gessler leaving, and as he entered he unhesitatingly said to Dasa, "Norman has been here."

"Yes," she answered, "he has, and gone," and there was a peculiar note of uncasiness in her voice. "He is pleased with his success," continued Dasa, "and expects to be a big painter some day."

"But I want to tell you something, Will. It came to me after you had left me to-day. McGinness, one of the members of the hanging committee with you, told it to me. It is about you."

"McGinness had no right to tell you anything; had no right to speak, especially about me," stormed York.

"Right or no right, I am glad he has told me. Your picture was about the same size. You withdrew yours. It was kind of you, Will, generous, indeed."

"Oh, it was not my generosity so much as I wanted to see him have fair play, for, as you told me, success meant so much to him and as I had already established myself, the simple hanging of a picture did not mean to me what it does to him. But I am going away to-morrow, and if you would enjoy a little stroll out upon the old bridge, it will please me, and I believe do us both some good."

There was a remarkable complication of hope and dejection garbled in their desultory conversation as they walked to the river front and onto the bridge.

Yes, through many sunsets they had stood and watched the slowly fading colors from the steeples and roofs of the city—had watched shadows creep upon the long expanse of water, as it flowed from the far west to splash and tumble over the dam but a short distance from where they stood—had strolled and waited until the red glow of the western sky had all disappeared and the stars appeared.

"And this is the last time you and I shall drink in these scenes," sighed Will. There was a fulness in the throat and a semblance of tear in his eye, as he looked away over the small village to the south, to the towering mountain background and the motionless white clouds above.

"It has been very pleasant here and everywhere with you. I shall miss you—how much had better be left unsaid."

His words turned her thoughts to the future.

"What?" she cried in a low voice.

"Leave me! And why?"

"Must this be our last sunset?"

"You understood Norman's picture?"

"Yes."

"And I thought you were blind! It was unanimous of you, Will, truly."

"I am not thinking of the picture. It was something more."

"Norman Gessler has been here," York said hoarsely.

"Yes," said Dasa, "and gone."

"What do you mean by your emphatic 'gone'?"

"Simply this—I mean that a rose will fade and die, but honor and chivalry are jewels imperishable, and the girl in the picture has chosen the more lasting of the two, and you will postpone your trip abroad until later, won't you?"

## Little Science Stories

BY FRANK H. SWEET

### Photography

PERFECTED photography, like all other arts and sciences, is the product of long years of investigation and patient experiment. Just at what time some unusual phenomena of light spurred the inquiring minds of early scientists to investigation is not known. Certain it is, however, that observations on the changing of colors in the sunlight were made far back in the history of the human race. Tan on the skin and the bleaching of cloth by exposure to light were among the first effects noted. These facts, scattered as they were, finally led to general interest and continuous experiment.

The first seeds of photography were sown when an ingenious Italian philosopher, Giambattista della Porta (1540-1615) invented the camera obscura, which was so simple and reflected such beautiful images that all who saw it were lost in wonder. Porta himself exclaimed: "We can discover nature's greatest secrets."

But the camera obscura, although the

parent of the perfect apparatus which has grown up with photography, was little more than an interesting scientific toy, possessing no practical value. It solved the problem of obtaining the image, it is true, but inspired little hope that the image could be transferred to some sensitive paper with greater delicacy and beauty of outline than the hand of man could ever trace it.

Valuable experiments were made by Fabricius in the sixteenth century, and by Scheele, the great chemist who, in 1777, investigated in a thoroughly scientific manner, the effect of light on silver chloride. He observed the changes of the chemical, and noted carefully the action of variously colored lights upon it. His statements as to the chemical change brought about were accepted as fully correct, and remained unchanged and without important addition for almost a century.

Three men divide the honors of making photography a practical art. The first of these to find a process of photography which gave pictures that were subsequently unaffected by exposure to light was Nicéphore Niepce (1765-1833). Niepce's process consisted in coating the surface of a metallic plate with a solution of asphaltum and oil of lavender and exposing it to the camera image. After a long exposure, a very faint image was seen on the surface of the metal plate. This was developed in a solution of oil of lavender in ten parts of white petroleum, producing a genuine photograph, but one far from pleasing to behold. But Niepce was not discouraged. He continued his experiments, and gave the best years of his life to the development of that science which he did not live to see perfected.

It is not easy to estimate the influence of Niepce upon his more successful partner, Louis Jacques Mande Daguerre. Daguerre had taken up the study of photography many years before his meeting with Niepce, and had pursued his experiments alone. Later a partnership was formed, and research was continued along the method prescribed by Niepce. But not for long, for Niepce died in 1833. Certain letters left by him, in which the use of iodine, sulphur, phosphorus, etc., on metal plates is mentioned, lead us to believe that a great part of the success in producing the daguerreotype is due to him.

Daguerreotype pictures were taken originally on silver-plated copper, the plate being first highly polished and exposed to iodine vapors. When the plate became a golden orange color, evidencing the stage of highest sensitiveness, it was transferred to the dark side of the camera. Long exposures, varying from three to thirty minutes, were required.

The development of the image obtained by means of mercury vapor is due to a chance discovery by Daguerre. The use of iodized silver plates necessitated such long exposures that he set about to shorten them by different reagents. Having at one time exposed such a plate to a camera image, he unintentionally placed it in a dark cupboard where various chemicals were stored. He discovered on the following day that a perfect image had been developed on the surface of the plate. By investigation he learned that the intensification of the dim camera image was caused by the action of the vapor of mercury, which volatilizes at an ordinary temperature. This discovery was important, enabling him to shorten the time of exposure.

Perfect as Daguerre's invention seemed at the time, it remained for an Englishman, Henry Fox Talbot (1800-1877), to perfect an even greater process. Like Daguerre, Talbot worked with silver salts, but there was one striking difference in their methods. Instead of using a silver plate as a basis for the sensitive compound, Talbot used paper. The daguerreotype is a positive, and will always remain so. Talbot's product was a negative, capable of producing many positives. Silver chloride on paper was the sensitive substance Talbot used for taking impressions.

The discovery of a developing agent, like that of Daguerre, was attributable to accident. One day by chance an unfinished picture came in contact with some extract of nutgall, and from that pyrogallol acid. The defects of Talbot's pictures, which at that time were crude and unsightly compared to the beautiful results obtained by Daguerre, are directly chargeable to the inferior quality of paper used.

But all modern photography is the legitimate offspring of Talbot's ideas and experiments. Many improvements (such as the use of albumen, collodion, and finally gelatine) to retain the silver salts on the sensitive plate were made, but the Talbot process was carried out in every improvement. Glass for a time supplanted paper for negatives, but has itself given place to films, which are now generally used.

(The Electric Light will be treated next issue.)



## Charms o' Summer

BY WM. EBEN SCHULTZ  
Flowers all a-bloomin',  
Raisin' up their heads;  
All the air perfumin'  
From their grassy beds.

Shady spots invitin'  
In secluded ways;  
How our cares can lighten  
In the summer days!

Skies o' blue are o'er us,  
Summer's natural dome;  
Grassy slopes before us,  
Where we love to roam.

Dreamy woodlands quiet,  
Many a pleasant nook;  
Shady streamlet by it,  
Where fish await the hook.

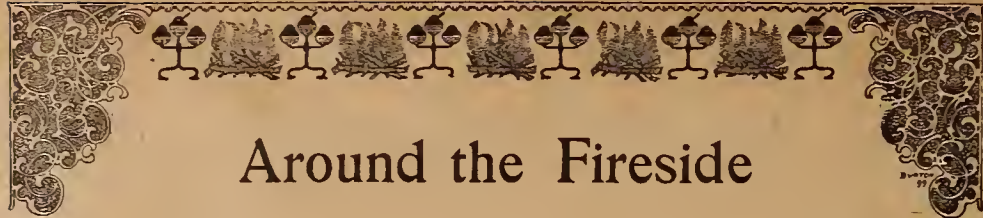
These reward the comer,  
Seekin' coolin' bowers;  
These are charms o' summer,  
These enchant the hours.

## Those Summer Boarders

THE summer boarder is again abroad in the land, whereof the keeper of the summer boarder is glad or sad according to the decree of the fates in sending the summer boarder into our rural homes. Those who have had experience with that nomadic individual, the summer boarder, will agree with the old lady who said, when discussing this specimen of the human family:

"It depends entirely on who you git when it comes to taking summer people. Some are just as nice and agreeable as can be, and others—well, I don't want to be uncharitable in judgment, but I don't know of any person more trying than some summer boarders can be—specially the kind that ain't used to much in their own homes. Them's the kind that puts on most when they go away to board. Them's the kind that leaves any manners they ever had at home when they go away to board in the country.

"Now you take the folks my son and his wife had last summer. There was a man and his wife and their three children and his wife's mother and a nurse-girl, and you know my son's wife did all her own work, and she with three children of her own and her husband and hired man to do for. I declare I wonder that Susie, my son's wife, wa'n't a candidate for the insane asylum before the summer was over the way that outfit acted. They had been out and looked the place all over before they engaged board, so they knew just what the accommodations were beforehand, and yet they begun to criticize and complain as soon as they got there. They found it 'dreadfully inconvenient' not to have a bathroom, and they knew there was no bathroom before they came. Then they didn't see how they were ever to get along with such small closets, and they talked about how hard it was to be 'three miles from a lemon,' the village being three miles away. They 'did miss' not having the daily paper left at the door every morning, and they 'didn't see how John's folks ever got along having the mail brought to the house only once a day.' Then they found it 'such a nuisance not to have running water in the house,' and they wondered why my son didn't have a telephone. They said they got nicer fruit in the city than in the country, and that city cream was thicker and richer than country cream. The mother-in-law didn't drink coffee and the father didn't drink cocoa and his wife never drank anything but weak tea, so there were three kinds of drinks to be prepared every meal. "As for the children, my land! You talk about the refinements of city life! If



## Around the Fireside

them youngsters were specimens of what the refinements of city life can do for children I would prefer to have my children raised in the backwoods as far as possible from such 'refinements.' Them children would stand at the front gate and sass everybody that went by, and their parents thought it was 'cunning' when their youngsters spoke of the country people as 'jays.' One day my son's wife found the whole family laughing over the pictures in the album on the parlor table, and the mother asked who that 'awful guy' was on one page of the album, and that 'awful guy' happened to be my daughter-in-law's father, one of the nicest men in the world. And when Susie told them that it was her father they all burst out laughing, and the father said to his wife, 'You put your foot in it that time, May.'

"The children couldn't look at a cat or dog or a cow or calf or any other kind of an animal without shying stones at them, and they threw a cat into the well and climbed onto the roof of the house and put a board over the kitchen chimney one day when dinner was under way. None of the family ever lifted a finger to do a thing for themselves, although they saw how Susie was being overworked, because

summer boarders, and ag'in there are summer boarders. Some are a pleasure and some ain't, and I pity the folks that gits them that ain't!"

MORRIS WADE.

## Big Family of Farmers

ONE of the unusual features about the big family represented by the accompanying picture is that all of the children were kept on the farm.

In this age the children of farmers are wont to leave the fields and cast their lot in the towns and cities, but Jeff Potter, the head of this big lot of womanly women and manly men was able to make the farm so attractive that all remained to till the soil, that is, all of the grown-up children, and it is not expecting too much of the younger ones to do the same.

Mr. Potter has been a tenant farmer all of his life, until quite recently, when he bought a one-hundred-and-sixty-acre farm in Missouri and has taken his family to it. For twenty-five years he farmed in Henry County, Illinois, near the city of Kewanee. He is now on his own place on the 'Frisco line, near Lamar, Missouri.

Mr. Potter was twice married. Of the first union there were fourteen children,

collection and disbursing of a million and a half dollars every day in the year, and for the custody all the time of more than a billion dollars in cash and bonds. "Leslie's" says that the various secretaries of the last forty years have handled altogether the incomprehensible sum of \$45,000,000,000. What is more, during all that time less than a fourth of a million dollars were lost in the Treasury Department.

During any one week of the present year the treasury officials expended more than was required to maintain the entire public service for the whole year of 1905. The money collected by the treasury last year, in round figures, was \$540,000,000. The total amount expended in the same twelvemonth was \$582,000,000. We spent thus \$42,000,000 more than we took in; but fully \$40,000,000 of the excess in expenditure over revenue is accounted for in the single check given in payment for the Panama canal property.

The biggest bill collected by the treasury was \$261,000,000 for customs; the second largest bill collected was \$232,000,000 for internal revenue; then \$9,000,000 was taken in for the sale of public lands, and \$37,000,000 for various small matters. The largest bill paid in the same time was \$142,000,000 for pensions; then \$115,000,000 for our army and \$102,000,000 for our navy. To Indians there was paid a little matter of \$10,000,000, and for the interest on the public debt \$24,000,000. Finally the treasury expended \$186,000,000 for mere miscellaneous "items." If we count all the dollars paid out by the treasury since Mr. Roosevelt entered the White House we find that the sum reaches the enormous amount of two billion dollars.

## Miss Krupp's Big Income

ANTOINETTE BERTHA KRUPP, the richest woman in the world, and heiress to the great German ironmaster, is engaged to marry Gustav von Bohlen, a young German diplomat of slender means. The wedding is scheduled to take place in October.

When she insisted on her engagement the family had to yield, for her father stipulated in his will that her choice of a spouse should not be influenced.

Her bridegroom-elect, Gustav von Bohlen und Halbach, is thirty-six—fifteen years older than she is. He has known Bertha ever since she was a child, when her father was Minister for the Grand Duchy of Baden at The Hague. He is connected by kinship or marriage with Prince Leopold of Lippe.

It has been reported that he is a poor man, but in truth he owns considerable property, though his fortune is a mere bagatelle compared with Bertha's wealth.

Her property in the mammoth ironworks at Essen alone is estimated to be worth \$40,000,000, and eventually she will be worth \$150,000,000 or more. Her annual income is said to be \$5,000,000. She manages her properties with remarkable ability and employs 300,000 people.

## Big Dry Dock Reaches Philippines

THE news reports of the past week interestingly tell of the last leg of the famous cruise of the floating dry dock "Dewey" on its way to the Philippines. The dry dock was expected to reach its destination between July 12th and 15th. Few naval movements in recent years have attracted so much attention as the voyage of this monster dry dock from Chesapeake Bay to Cavite, in the Philippines. The towing of such a huge body so great a distance was something of a problem in navigation of itself; then there was the danger of storms, especially in the Indian Ocean, and the officials have waited with keen interest the news that Commander Hosley and his vessels, with the dry dock, were out of danger.



AN ILLINOIS FARMER'S BIG FAMILY OF FARMERS

she had been disappointed about the help she had expected to have, and had found it impossible to get anyone else. Those people never made a bed or offered to lift a finger to do a thing, and they expected Susie to do things for them that they could have done for themselves just as easy as not.

"That's one kind of summer boarders. But I'm thankful to say that not all of them are like that. My daughter Ellen had some last year that were just nice. They didn't forget that it isn't reasonable to expect all the city conveniences on a farm and in a farmhouse, and they adapted themselves beautifully to things as they found them. They were just as nice and polite to Ellen and her family as they would have been to their city friends, and they never made fun of the country people nor of village ways. They made their own beds and did lots of little things for themselves, and when they wanted anything they asked for it in such a pleasant way that it was a pleasure to do it for 'em. I tell you they were nice, kind, refined folks, and when you get that kind keepin' summer boarders ain't so bad. But that other kind—well, I'd rather hoe corn than have 'em around. There are

of the second four, eleven daughters and seven sons. The oldest child of the older set is but two years younger than the second wife. The latter entered the home when there were eight young children to raise. She was loved from the first day she entered the Potter household, and today she is as much to any of the children as was the wife who has gone to her reward.

All of the children became accomplished farmers, the daughters as well as the men. Illinois never produced a better lot of housekeepers and farm women, and the boys were apt scholars in their father's school of agriculture. None of them seem to regret the choice they made, they are as much farmers as they were years ago. Missouri is fortunate indeed in being able to add such a family to its growing population.

J. L. GRAFF.

## Our National Treasury

NEXT to the State Department the Treasury Department is the most important branch of the government. It is the fiscal agency of the people. At its head is the secretary of the treasury, who for a salary of \$22 a day is responsible for the



**The Old Mill of Nantucket**

Last of thy race, receive my humble greeting;  
 Here on thine ancient hill,  
 While o'er thy head the restless years are  
 fleeting,  
 Thou standest calm and still;  
 With Sphinx-like aspect and with presence  
 stately,  
 Guarding thy secrets well,  
 From thy lone height thou lookest forth se-  
 dately,  
 O steadfast sentinel!

THUS wrote a poet of Nantucket of one of the most ancient landmarks on that beautiful little island, the old windmill.

It is now two hundred and forty-six years since Thomas Macy went to Nantucket as the first white settler of the island, the fifty square miles comprising the island having been conveyed to Macy and nine other associates. The other owners soon came to join Macy, and from that day to this Nantucket has been inhabited. The island did not become a part of Massachusetts until the year 1693. Previous to that time it belonged to New York. It was about this time that the whale-fishery business began, and for many years it was the chief industry in which the inhabitants engaged, and Nantucket became famous for the number of its vessels engaged in fishing for whales. Now it is famous as one of the most delightful of New England summer resorts, and it has become

An ancient town, a very ancient town,  
 With rotten wharves, and quiet, grassy  
 streets,  
 And quaint old houses wrinkled in the sun.

The old windmill is of very ancient origin, but the exact date of its erection cannot be given. The late Mrs. Jane G. Austin, who wrote so charmingly of Nantucket, had the story of the old mill given to her by a native of the town in these words:

"They wanted a windmill and didn't know how to make one; and they got an off-islander, name of Wilbur, to make it, and like fools gave him the money beforehand. He went back to the continent for something—nails, maybe, or maybe ideas—and carried the money with him; some pirate or other got wind of it, and the first they knew down here the man was robbed and murdered there on Cape Cod. That didn't put up a windmill, though, and the women had got 'most tired grinding their sump and meal in those old stone mortars, or even a handmill; so some of the folks spoke to my grandfather, Elisha Macy, about it, and he thought it over and finally went to bed and dreamed just how to build it, and next day got up and built it. That's the story of that, my dear."

When the mill that had been in some sense a case of revelation had been standing nearly one hundred years, it had grown so infirm that its owner decided to sell it for all it would bring as old lumber. A meeting was called and Jared Gardner, a man on the island supposed to know more about mills than anyone else, was invited to attend the meeting. He came, and Sylvanus Macy asked,

"Jared, what will thee give for the mill without any stones?" for there were many Quakers on the island at this time.

"Not one penny, Sylvanus," replied Jared with decision.

"What will thee give for it as it stands, Jared?"

"I don't feel to want it at any price, friend," said Jared, with a discouraging lack of enthusiasm. Then the owners of the mill held a conference, and one of them said,

"Jared, thee must make us an offer."  
 "Well, then, twenty dollars for firewood, Sylvanus."

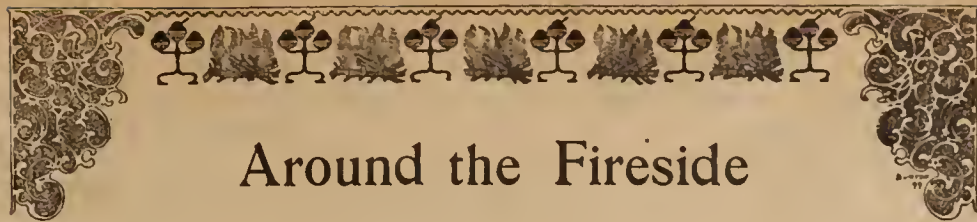
This offer was at once accepted, and what did the wily and thrifty Jared do but put the mill into good repair and make it a source of profit to him until the day of his death.

Many songs have been written to the ancient mill, and tales of romance are associated with it. In one of the poems we find these lines:

From sturdy oaks, like those that flourished  
 near thee,  
 Thy timbers stout were hewn—  
 Where are the woods, and they who came to  
 rear thee  
 In some forgotten June?  
 Couldst't thou recount their tales of toil and  
 danger  
 From over sea and land,  
 How wouldst't thou hold enthralled the  
 curious  
 And rightful toll demand?

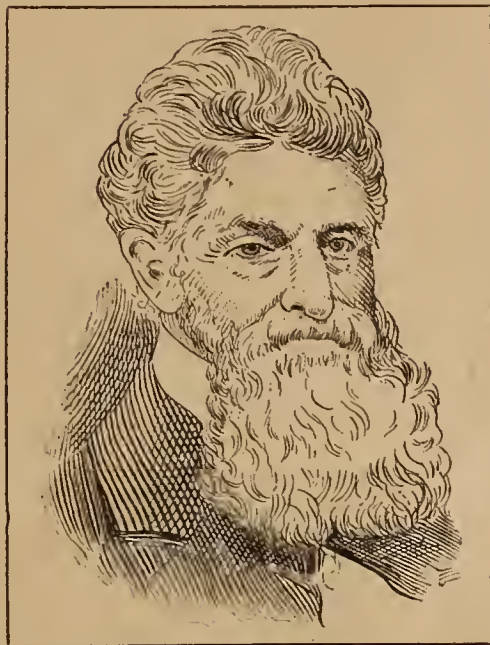
One who visited Nantucket last year writes thus of her decadent prosperity and population:

"In this year of grace, 1905, Nantucket's



**Around the Fireside**

glory and grandeur have departed; her population has dwindled from ten thousand to less than three thousand; her sea captains are nearly all dead; their descendants mostly resident in active fields of labor on the mainland; but the old island is still beautiful and still holds out inviting arms and offers her great sanitarium to annual hosts of strangers who



JOHN BROWN

seek her shores in search of health for mind and body and weary nerves. Her charms are as seductive, her climate as salubrious, her breath as sweet with the invigorating salt-sea flavor as in the olden times of her prosperity."

**To Honor John Brown**

A DESPATCH from Topeka, Kansas, says that preparations are being made by the citizens of Osawatomie, the old home of John Brown, to celebrate the fiftieth anniversary of the battle fought there August 30, 1856. Vice-President Fairbanks is scheduled to deliver the principal address. Governor Hoch, of Kansas, and Governor Folk, of Missouri, representing

it is even so. I am now shedding tears, but they are not tears of grief and sorrow; I trust I am nearly done with those. I am weeping with joy and gratitude I can in no other way express. I am waiting cheerfully the days of my appointed time, fully believing that for me now to die will be to me of infinite gain and of untold benefit to the cause we love."

The only survivor of the John Brown raids is W. J. Clark, now a resident of Chicago.

Twenty-eight years ago a monument was erected to the memory of John Brown by the citizens of Osawatomie. John J. Ingalls was the orator of the occasion. The monument is of plain white marble and not more than twelve feet high. It cost about \$400, the money being contributed by the early settlers of Osawatomie and vicinity. There are inscriptions on the four sides of the monument, but this one tells the story,

In commemoration of the heroism of  
 CAPTAIN JOHN BROWN,  
 Who commanded at the battle of Osawatomie, August 30, 1856. Who died and  
 conquered on the scaffold at Charles-  
 town, Virginia, December 2, 1859.

**Rockefeller's Wealth**

ACCORDING to a statement in the New York "World," John D. Rockefeller's own physician, Paul Allen, M. D., assures him that he has every prospect of living to be one hundred years old. The energetic reporter has therefore raised the question of the probable immensity of the Rockefeller fortune thirty-three years from now.

Thirty-three years from now—or, to be exact, on July 8, 1938—Mr. Rockefeller will celebrate the one hundredth anniversary of his birthday—provided, of course, that he lives to fulfil his physician's prediction.

And thirty-three years from now, if his millions continue to increase at the present rate, Mr. Rockefeller, at the age of one hundred years, will be worth \$25,732,000,000—almost three times as much gold and silver as there is in circulation, in banks and in all the treasure-houses and mints on earth to-day.

It is impossible for the human mind to comprehend the vastness of such a sum of money as \$25,732,000,000. But if anybody



NANTUCKET MILL—AN ANCIENT NEW ENGLAND LANDMARK WITH A HISTORY UNIQUE AND INTERESTING

the two states, whose citizens participated in the fight at Osawatomie, will also speak.

At the celebration next August a pioneer still living who remembers the battle of Osawatomie will read the letter written by John Brown to his sisters from the jail in Charlestown on the Sunday before he was executed. This letter is the property of the Kansas Historical Society, and bears date of November 27, 1859, and is as follows:

"Oh, my friends, can you deem it possible that that scaffold has no terrors for your poor, old, unworthy brother? I thank God through Jesus Christ, my Lord,

wanted to count it, all in one-dollar bills, counting steadily at the rate of \$3 a second, day and night, without stopping for a moment until the task was ended, it would take 295 years, 5 months, 2 weeks, 16 hours and 35 minutes and 33 seconds to complete the work.

Nobody knows just how much Mr. Rockefeller is worth at the present time. It is doubtful whether he himself could give an estimate that was not a million or two off the mark. Careful investigators have computed his wealth at \$615,000,000, recently, and this figure is believed to be as accurate as it possibly can be.

In 1905 Mr. Rockefeller was worth \$550,000,000, showing a gain for the present year of \$65,000,000. In 1900 he had only \$400,000,000, and the year before that he was poorer still, \$250,000,000 representing his total wealth. In 1885 he had \$100,000,000; in 1875, \$5,000,000; in 1872, \$1,000,000; in 1870, \$50,000; in 1865, \$5,000, and in 1855 not a solitary penny. During the past fifty-one years his fortune has increased from nothing at all to \$615,000,000.

**President to Go to Panama**

PRESIDENT ROOSEVELT is again to do the unexpected. Early in November he will visit the Isthmus of Panama and personally investigate the canal situation. Ever since the United States acquired possession of the canal zone, it has been the president's earnest desire to see the great ditch and the gigantic work that the engineers are pushing forward. The president recognizes the Panama Canal as the greatest enterprise that this country has ever undertaken, and he feels it his duty to personally inspect it and become personally conversant with the actual details as they are on the ground and not as they are on paper.

The details of the trip have not been fully worked out, but it is expected that he will leave Washington early in November and that the trip will probably consume about three weeks. He will probably leave Washington on the "Mayflower," and at Hampton Roads board one of our biggest warships, which will take him to and from the isthmus. It is expected that the secretary of war will be one of the party, and it is certain that Chairman Shonts, of the Canal Commission, will go as the president's personal escort and guide on the trip. Chief Engineer Stevens and his assistants will probably meet the party at Colon.

On the subject the New York "Tribune" says that objection is likely to be raised in certain quarters that the president will set at defiance the old idea that the chief executive must not go outside of the limits of the United States while in office. But he may reply to this that to go to Panama would be no worse than sailing from New Orleans to Washington, a feat he accomplished last year. On that journey he was taken outside the "three-league limits" more than once, was often out of sight of land, in fact, and still the Constitution of the United States survived and the Capitol rested calmly upon its foundations.

The old sentiment became common long before the United States acquired any possessions beyond the seas. The canal zone is part and parcel of this country, and it is the right, as well as the duty, of the president to make himself acquainted with all parts of the territory. He could, were he able to spare the time, visit Porto Rico, Hawaii and the Philippines, as there is nothing whatever in the law, written or unwritten, to prevent. On the contrary, with constant communication maintained between him and all parts of the United States while he is on the high seas, keeping him in close touch with the capital and enabling him to maintain a strong grasp on all administrative affairs, he would be practically in the United States all the time that he remained on a powerful national vessel as well as while he was in the canal zone.

It is regarded as practically inconceivable that under such circumstances the fifth clause of Article II. of the Constitution, relating to the "removal of the president from office . . . or inability to discharge the powers and duties of said office," could be invoked or become operative. It is promised by the Navy Department that its new wireless stations at Key West, Guantamo and Colon will be in perfect order by midsummer, and that communication between them and ships in the radius of any of them will be continuously maintained. Confidence is also manifested that no one will have the temerity to raise any question as to the validity of the president's acts while he is on a national vessel or on United States soil at the isthmus.

On account of the Panama trip the president will not be able to make a journey to San Francisco this fall, which he was considering upon the urgent request of the people of that devastated city. The corner-stone of the new federal building there is to be laid in October, and to help along the rejuvenation of the city great pressure was brought to bear upon the president to attend. He had almost decided to make the journey when he found that he could make the more important trip to the isthmus.

Secretary Loeb announced that the president has decided not to make any extensive tour of the Middle West next spring. He has definitely promised to attend the semi-centennial of the establishment of the State Agricultural College at Lansing, Michigan, in May, and will keep that engagement, but he will not be able to make any side trips either going or coming.



## Hot-Weather Breakfasts

**B**REAKFAST in summer is the bugbear of the country housekeeper. City people think they could manage very well with the supply of milk, cream, butter and eggs the country woman has at her command, but they know nothing of the demands upon the breakfast table around which hearty workers assemble on the farm. The city man eats his small dish of cereal, a roll and a little fruit before going to work at nine in the morning, but the men on the farm are in the fields hours before that time and must have substantial food that will sustain them until dinner-time.

Hot cakes and biscuits are not to be thought of when the thermometer is sizzling, but for cool, rainy days they are just the things for a welcome change. A heavy morning storm that makes work impossible outdoors gives time for a late breakfast, and on these occasions the housewife can profitably serve hot bread as the chief dish. To have variety with little extra work should be the aim of the country housewife, and the dishes described below may furnish a little change for the menu.

**COATED POTATOES**—Boil a number of new potatoes about the size of a small egg in some salted water till tender the day before they are to be used. In the morning drop in a batter made of one egg, a pinch of salt, a teaspoonful of flour and three tablespoonfuls of sweet milk. Fry in hot fat till a golden brown. The potatoes may be peeled before or after cooking.

**BREAD AND POTATOES**—Break stale bread into bits about the size of a small cracker and fry in the same pan with an equal quantity of potatoes. Fry until the bread is soft and tender.

**SOFT TOAST**—Make a quantity of toast and keep it warm in the oven until time to serve. Butter quickly and pour over it hot, not scalding, sweet milk. Shake a little sugar over the whole and serve.

**LIVER AND BACON**—Ten cents' worth of liver purchased late in the evening will be enough for a large family and will keep in a cool place until early morning. It is not as heavy as pork or steak for hot-weather breakfasts and is excellent for a change. Fry until brown in the same frying-pan with the bacon, and serve hot.

**POTATOES AND EGGS**—Just before removing fried potatoes from the fire break among them half a dozen eggs and gently stir until eggs are cooked soft.

**FRIED SWEET POTATOES**—Boil sweet potatoes the day before they are to be used in salted water till tender enough. In the morning place a lump of butter half the size of a small egg in the frying-pan and dust the potatoes lightly with salt and pepper. Fry until a delicate brown. If desired they may be brushed with butter and baked in the oven in the morning until brown. The latter method is less trouble.

**CREAMED PEAS**—Cook the peas the day before and place them in a granite kettle. In the morning add half a pint of rich sweet milk and one teaspoonful of flour to slightly thicken the gravy. Butter the size of a small egg and the whole heated boiling hot. Serve with bread and butter.

**DIPPED BACON**—Dip thin slices of bacon into a batter of one egg, one teaspoonful of flour and three tablespoonfuls of milk. Fry until crisp.

**FITTERS**—Make an ordinary pancake batter, using one more egg than usual, and just before baking on the griddle add green corn, bits of apple, peach or egg-plant. Fry in deep lard until a golden brown. Serve with butter and syrup.

**FRIED APPLES**—Slice tart apples medium fine and fry in a very hot pan with just enough butter to keep from scorching. Cover tightly and when tender sprinkle lightly with sugar.

**CREAMED POTATOES**—Use up the small new potatoes for this dish by boiling a quantity in the skins and peeling when cold. Make a cream sauce in a granite pan with a pint of rich milk, one heaping tablespoonful of flour, and a large lump of butter. Add salt and pepper after the potatoes begin to get hot and stir all the time until thoroughly heated. Try to have the potatoes so small that they need not be cut in pieces.

**FRESH FISH**—If a trip to town makes it possible to obtain fresh fish in hot weather, fry them at once rolled in flour. Place in a granite pan and next morning reheat in the oven. They are quite as good as when freshly cooked and save a great deal of trouble when time is limited in the morning.

HILDA RICHMOND.

## Hairpin Crochet

**A** UNIQUE and effective trimming for shirt-waists, children's dresses, etc., is shown in Fig. 3. It is a combination of Maltese or hairpin lace, crocheting, and weaving stitch, and may be made of silk or linen thread, according to the material upon which it is to be used. The width may be regulated to suit the worker by



## The Housewife

increasing or diminishing the breadth between the prongs of the pin in making the hairpin lace.

This hairpin lace is made over a smooth hairpin or wire bent to simulate one. The wire must be very smooth, sand-papered, if necessary, and the prongs must be equally distant the entire length of whatever width desired. A space three fourths of an inch between the prongs makes an attractive width.

A loop is made in the thread and placed over one prong of the hairpin. The knot

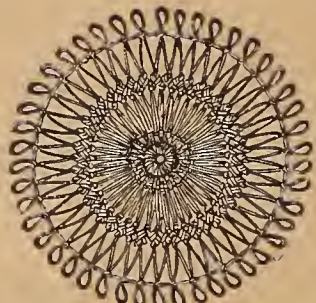


FIG. 1. WHEEL IN HAIRPIN CROCHET. See Fig. 2

is pulled to the center of the space between the prongs, the thread carried around the other prong from front to back and over the crochet-hook, which should be thrust between the two threads of the first loop; now draw the thread through, and make one double crochet under the same thread. Turn the hairpin over, always turning from right to left. This necessitates removing the hook from the loop and replacing it on the other side after turning. Make the stitch in center as above, repeating the process as often as is necessary to complete the length of lace required. It is well to roll the lace carefully as it is slipped from the pin and place in a fold of muslin. This will prevent soiling as well as assist in keeping it free from tangles.

The crocheted edge follows. The first row on both edges is simple chain stitch, every fifth stitch being taken through three of the hairpin loops. The central stitch between shows a small loop. To make this have three chain stitches; take the hook from the end loop, and insert in the first of the three, then through the end loop, throw the thread over hook and pull through, proceeding with ordinary chain stitch. The returning row of crochet, or outer edge, is alternate chain stitch and double crochet.

To form the cone-like figures on the loops of hairpin lace use a blunt needle, being careful not to split any of the threads. Fasten the end securely on the first crochet stitch in the center, and bring out between the threads of a loop. Now weave under and over the threads of this loop and one thread each of the two adjoining loops, the weaving to be over two threads and under two. When the ends

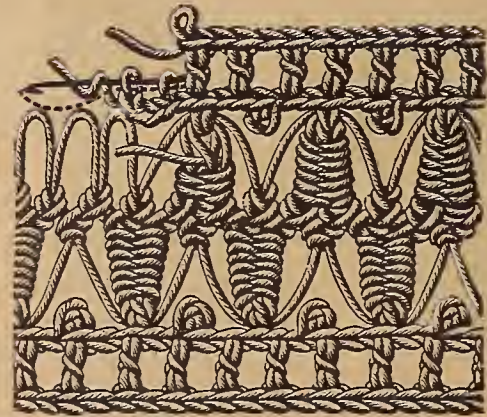


FIG. 3. TRIMMING IN HAIRPIN CROCHET AND WEAVING STITCH

of the loops are reached run the thread back through the cone to the center, and proceed the same way on the opposite side, the cones alternating with the two threads of the loops not covered by darning.

This braid-like trimming is particularly pleasing when developed in coarse écu or black silk for use on white or pearl-gray material. The color is, however, a matter of personal selection, and may be chosen to harmonize or contrast with the background.

The wheel shown in Fig. 1, when developed in fine linen thread, makes a very pretty decoration for linen centerpieces and doilies. These are best used as an insertion, on account of the delicate edge, which, if used without any protection, must be picked out with a knitting needle

each time it is laundered. A very attractive luncheon set to be used without a cloth, on a table of polished wood, is square in shape and consists of the large centerpiece with inserted wheels two inches in diameter, the plate doilies with one-inch wheels, and the tumbler doilies with half-inch wheels.—Modern Priscilla.

## Denaturated Alcohol in the Home

**T**HE use of denaturated alcohol in the home will be a boon to women. I know of no class who will reap more benefit from it than the women of our farms. It is to be hoped that the people will be sufficiently alert to prevent its being monopolized and the price made prohibitive. It will not entirely supersede kerosene and gasoline, but it will greatly reduce the use of these articles. Many women have hesitated about using gasoline stoves because of the disagreeable odor and smoke. Alcohol makes a strong, steady, white light, leaves scarcely any residue, is non-explosive, readily mixes with water, which is a valuable desideratum in case of fire, and produces a high heat. It is not too much to hope that much of the drudgery in the more advanced homes of the farm will be relieved by the use of power generated by this cheap fuel. The less progressive will follow in the same old methods for years, and perhaps will never change.

The price can be kept low if the people are alert. It's a case of locking the door before the horse is stolen. If the commissioner of internal revenue decides that small distilleries can make the denaturated alcohol it will lessen the grip the large distilleries might get, and open to many sections an opportunity for manufacturing surplus products into fuel. No opportunity in recent years for preventive action has been offered so great as this. Let a strong public sentiment grow up favoring manufacturing in the small distilleries. If there are legal restrictions, see that they are removed. It's a question in which women are vitally interested, one that offers them the "bloom or blight" of making easier their work, or accepting the same old conditions. Let not this great victory be converted into a hardship. The people won the fight. Let them enjoy the victory. Alertness will save it to them.

MARY E. LEE.

## Tried Cake Recipes

**DRIED-APPLE PIE**—Two cupfuls of dried apples chopped very fine and soaked in water over night and then cook. To three small cupfuls of molasses, add one half cupful of butter, one cupful of sugar, one cupful of sour milk, two teaspoonfuls of soda, one cupful of raisins, one teaspoonful each of cinnamon, cloves, lemon and ginger, four cupfuls of flour.

**EGGLESS CAKE**—One cupful of sugar, one cupful of sour milk, one cupful of chopped raisins, one half cupful of butter, two cupfuls of flour, one half ounce of soda dissolved in hot water, one half ounce cinnamon, one half ounce grated nutmeg, one half ounce cloves.

**FAVORITE LAYER CAKE**—One and one fourth cupfuls of sugar, one half cupful of butter, one half cupful of sweet milk, two cupfuls of flour, two teaspoonfuls of baking-powder and three eggs. Cream butter and sugar thoroughly, beat yolks stiff and stir in, then add milk, then beat whites, add flour, and then beat hard.

**FRUIT CAKE**—Three pounds of butter, three pounds of sugar, three pounds of flour, three dozen eggs, two ounces of nutmeg, two ounces of mace and cinnamon, one pound of citron, three and one half pounds of raisins, five pounds of currants, one half pint of brandy, one tablespoonful each of allspice and cloves, sift flour, beat whites and yolks of eggs separate.

**FRUIT CAKE**—One cupful of butter, three and one half cupfuls of sugar, one cupful of sweet milk, four cupfuls of flour, one half cupful of New Orleans molasses, one pound of raisins, one half pound of currants, one half pound of citron, four eggs, one teaspoonful each of cinnamon, allspice and cloves.

**CORN-STARCH CAKE**—Whites of eight

eggs, two cupfuls of sugar, one cupful of butter, one cupful of sweet milk, two cupfuls of flour, one cupful of corn-starch, three teaspoonfuls of baking-powder.

**CORN CAKES**—One cupful of corn-meal, one cupful of flour, one half teaspoonful of baking-powder, two tablespoonfuls of sugar, one small tablespoonful of butter, one egg, one cupful of milk.

**FRUIT CAKE**—Two cupfuls of brown sugar, one cupful of lard and butter mixed, five cupfuls of flour, one teaspoonful each of cinnamon and cloves, one nutmeg, one small tablespoonful of soda, one pound of currants, one pound of raisins, two cupfuls of buttermilk.

**FEATHER CAKE**—Two cupfuls of sugar, one half cupful of shortening, whites of four eggs, three cupfuls of flour, one cupful of milk, three heaping-teaspoonfuls of baking-powder.

**FLANNEL CAKES WITHOUT EGGS**—One pint of buttermilk, one half teaspoonful of salt, piece of butter the size of a walnut melted, one and one half pints of flour, one half teaspoonful of soda dissolved in one fourth of a cupful of water. Bake quickly on a hot griddle.

**GINGER CAKES**—One pint of molasses, one cupful of lard, one cupful of sour milk, one tablespoonful of soda, one half teaspoonful of salt, one and one half cupfuls of sugar, one teaspoonful of ginger; flour to roll.

**HOME FRUIT CAKE**—Three teacupfuls of flour, sifted with three teaspoonfuls of baking-powder, one teacupful each of brown sugar and molasses, one half teacupful of butter, three eggs, half a teaspoonful each of cloves, cinnamon, allspice and nutmeg; one half pound each, stoned raisins, currants, citron and figs chopped fine, with one teacupful of nut meats. Mix the fruit and spices together the day before baking the cake. Bake in a slow oven.

## Greens Canned for Winter

**L**AST summer, having more Swiss chard and spinach than I needed for immediate use, I prepared it exactly as for the table by boiling in salted water, packed it in glass cans, filled the cans with hot, weak vinegar, and sealed tightly. I wrapped each can in a paper sack, which, by the way, retains the color, and put them away in the cellar. Last winter we enjoyed the loveliest greens imaginable. Not only are they very much nicer than the market canned, but they are very inexpensive, and every housekeeper will appreciate them at the season when vegetables are scarce.

J. B.

## Cleaning Hoods

**A**N EXCELLENT way to clean Angora hoods or light wool shawls is to dip in corn-meal and rub thoroughly. Corn-meal slightly dampened and sprinkled over a carpet before sweeping will make it look bright and clean. An iron dripping-pan placed over irons will economize fuel.

## Seasoning

**T**HIS is a bit of masculine wisdom: "The difference between a good cook and a bad cook is that the good cook knows how to season things." Years of experience have taught me to season fresh meats with a tablespoonful of brown sugar; fish with cider vinegar; chicken salad with a few drops of onion juice; corned-beef hash with cayenne pepper; baked beans with one half cupful of sweet cream during the last half hour of the baking; apple pie with three tablespoonfuls of freshly made Japan tea; boiled ham with cloves and peppercorns; and coffee with salt.

E. E. R.

## A Good Help in Dusting

**O**NE day while dusting the stairs I became quite discouraged at the little triangles of dust in the corners of the steps, which the cloth would not remove. The idea came to me suddenly that a small bulb syringe would be the instrument to eliminate it. I procured one, and the results were most satisfactory. With it I blow the dust from every corner I come to while dusting. Such a syringe can be bought for twenty-five cents at any drug-store.

J. W. M.

## Gluten Bread

**D**ISSOLVE one half cake of compressed yeast in two cupfuls of lukewarm water; sift three cupfuls of gluten-flour and one scant teaspoonful of salt into it; mix well and beat thoroughly. The mixture must not be kneaded; set it to rise in a warm place, and in two hours, or when light, add one tablespoonful of flour; beat again for two minutes, turn into a buttered pan, set to rise, and when light bake in a moderate oven for forty-five minutes. Cut slices of wafer-like thinness, brown delicately over a clear fire, and you have a perfect article of diet for dyspeptics.

A. J.



**Huckleberry Doings**

MARY FOSTER SNIDER

**T**HE homely huckleberry is quite as useful and delicious in the making of dainty dessert and tea dishes as many of the more lauded fruits, and rarely fails to find delighted appreciation when tried in any of the following recipes:

**GRANDMOTHER'S HUCKLEBERRIES**—Wash and pick over carefully, fine, ripe huckleberries, let drain in a colander a few minutes, then turn into a bowl, sprinkle with a little powdered sugar and pour over just enough rich maple syrup to give the berries a light coating, stirring it well through them. Then arrange the berries in a deep glass dish with alternate layers of dry whipped cream, which has been sweetened and flavored with lemon. Let stand in the ice-box just long enough to chill, then serve at once with hot biscuit.

**HUCKLEBERRY COBBLER**—Roll a rich biscuit crust rather thin and line an earthenware pudding-dish with it. Fill the dish nearly to the top with huckleberries, squeeze over the juice of a lemon, add a tablespoonful of water and sprinkle with a small cupful of sugar; put on the top crust, press the edges lightly together, and bake in a moderate oven for three fourths of an hour. Serve hot with cream and sugar.

**HUCKLEBERRY PUDDING**—Cream together half a cupful of butter and one cupful of granulated sugar; stir half a cupful of corn-starch smooth in one cupful of sour milk; dissolve a teaspoonful of soda in a little hot water, and stir all the ingredients thoroughly together, adding last one half cupful of maple syrup, four cupfuls of sifted flour, and one quart of fine, ripe blueberries, well floured. Spread a floured pudding cloth in the bottom of a deep mold, pour in the batter, tie tightly, and boil steadily for three hours. Serve with cream and sugar or with maple or lemon sauce. This is a most delicious pudding, and one especially appealing to masculine appetites.

**BAKED HUCKLEBERRY PUDDING**—Sift together two cupfuls of flour, one heaping teaspoonful of baking-powder, one level teaspoonful of salt and one tablespoonful of corn-starch; add one egg well beaten with one cupful of sweet milk, and three cupfuls of floured huckleberries. Mix thoroughly but quickly, turn into a buttered baking tin, and bake in a quick oven. Serve with maple syrup or cream and sugar.

**HUCKLEBERRY TURNOVERS**—Make a rich, soft biscuit dough and cut into circles with a saucer. Place a spoonful of huckleberries on one half, sprinkle with sugar and a teaspoonful of shaved maple sugar, fold over the other half of the crust, pinch the edges together, and bake on a buttered tin in a hot oven. Serve hot with butter and sugar or lemon syrup.

**HUCKLEBERRY TEA CAKES**—Sift together three cupfuls of sifted flour, three teaspoonfuls of baking-powder, a scant teaspoonful of salt and one heaping tablespoonful of sugar. Add one well-beaten egg, one and one half cupfuls of sweet milk, and mix the batter until perfectly free from lumps. Then stir in two tablespoonfuls of melted butter, and two cupfuls of floured huckleberries. Bake in hot buttered gem tins or patty pans in a quick oven. When done, split quickly, spread with soft butter, sprinkle over shaved maple sugar, put together again, and serve at once, with or without whipped cream.

**HUCKLEBERRY FINGERS**—Beat to a cream one fourth cupful each of butter and sugar, add one egg slightly beaten, one fourth of a teaspoonful of lemon extract and flour to make a soft dough. Spread over a shallow buttered tin and bake quickly in a hot oven. Cut in strips about five inches long and four wide, roll up, and fill with sugared huckleberries.

**HUCKLEBERRY SHORTCAKE**—Make a good biscuit crust, having it as soft as possible to roll out, and bake in two layers in a hot oven. When done tear the cake quickly apart, spread with soft butter, put on a thick layer of sugared huckleberries, heap over whipped cream, cover with the other cake, buttered, finish with more of the huckleberries, and smother the entire cake with whipped cream. Serve as quickly as possible after it is done.

**HUCKLEBERRY PATTIES**—Cream two tablespoonfuls of butter with one cupful of sugar, add one well-beaten egg, half a cupful of sweet milk, and one teaspoonful of baking-powder sifted in one rounded cupful of sifted flour. Lastly stir in one pint of well-floured huckleberries, turn into buttered patty pans or deep gem pans and bake in a quick oven.

If huckleberry desserts are wanted out of season the canned fruit, drained free of juice, may be used. An excellent recipe for canning is the following: To each quart of huckleberries allow one cupful of sugar, half a cupful of water and the juice of half a lemon. Make a syrup with the sugar and water, skim it well as it boils, and then put in the fruit and lemon juice.



**The Housewife**

Simmer very gently for five minutes, then seal boiling hot in well-sterilized glass cans.

**Knitted Bead Purse**

**T**HE materials required for this handsome bag are two spools of gray purse twist, twelve bunches of cut-steel beads, No. 8, and two medium-size knitting-needles.

It is knit in two parts, joined at the bottom and sides, mounted with a plain sterling silver clasp. The bottom is finished with a fringe of the beads. When



KNITTED BEAD PURSE

lined with kid it is a very useful accessory to the toilet in this day of the absent pocket.

Cast on fifty stitches, slip one stitch and knit two rows plain.

Third row—Slip one, knit one, wrap one, purl two together, repeat across the needle.

Fourth row—Slip one, knit one, slide fourteen beads close up to the needle, wrap one, purl two together, wrap once without beads, purl two together, then slide fourteen beads close to the needle, wrap once, purl two together, repeat until but two stitches remain on the needle; knit these separate and turn.

Fifth row—Slip one, wrap one, purl two together, repeat until two stitches are left, knit these and turn.

Sixth row—Slip one, knit one, push thirteen beads up, wrap and purl two together, repeat until two stitches remain, knit these and turn.

Seventh row—Knit back without the beads. Continue alternately with beads and back without, diminishing one bead in each row of loops until but one is used. Continue with the one bead until the desired length is attained. There should be twelve rows of loops across the bag. Care must be taken to keep the beads on the right side, without the loop twisting, as the tendency is to let a stitch drop. It is almost impossible to pick up a dropped stitch and have even knitting.

The fringe is made by stringing enough beads to make a loop the desired length. Twist the silk after the beads are on, just above the beads, and bring the needle through the bottom of the finished bag close to where the silk was first inserted for the fringe. The beads will twist themselves into a spiral; the strands should be close enough together to make a uniform thick fringe, but not heavy.

The cost of lining and mounting the bag, independent of the clasp (which may be as expensive as desired), is \$1.75.

M. E. SMITH.

**Heart and Shamrock Lace**

**C**AST on forty-six stitches and knit across plain.

First row; k 3, fagot, k 4, n, o, n, o, k 1, o, slip 1, knit 1 and bind, o, n, k 4, fagot, n, o twice, n, k 5, o, n, o, n, o three times, n, k 5, fagot.

Second row; fagot, k 7, p 1, k 1, p 1 (making four stitches out of loop), k 11, p 1, k 1, fagot, k 6, p 5, k 6, fagot, k 3.

Third row; k 3, fagot, k 3, n, o, n, k 1, o, k 1, o, k 1, slip and bind, o, n, k 3, fagot, k 2, n, o twice, n, k 4, o, n, o, n, k 4, o three times, n, k 3, fagot.

Fourth row; fagot, k 5, p 1, k 1, p 1, k 14, p 1, k 3, fagot, k 5, p 7, k 5, fagot, k 3.

Fifth row; k 3, fagot, k 2, n, o, n, k 2, o, k 1, o, k 2, slip and bind, o, n, k 2, fagot, n, o twice, n, n, o twice, n, k 3, o, n, o, n, k 2, o three times, n, k 7, fagot.

Sixth row; fagot, n, k 1, o, n, o, n, k 2, p 1, k 1, p 1, k 11, p 1, k 3, p 1, k 1, fagot, k 4, p 9, k 4, fagot, k 3.

Seventh row; k 3, fagot, k 1, n, o, n, k 3, o, k 1, o, k 3, slip and bind, o, n, k 1, fagot, k 2, n, o twice, n, n, o twice, n, k 2, o, n, o, n, k 12, fagot.

Eighth row; fagot, n, k 1, o, n, o, n, k 13, p 1, k 3, p 1, k 3, fagot, k 3, p 11, k 3, fagot, k 3.

Ninth row; k 3, fagot, k 3, o, n, k 7, slip and bind, o, k 3, fagot, n, o twice, n, n, o twice, n, k 5, o, n, o, n, k 10, fagot.

Tenth row; fagot, n, k 1, o, n, o, n, k 14, p 1, k 3, p 1, k 1, fagot, k 4, p 9, k 4, fagot, k 3.

Eleventh row; k 3, fagot, k 4, o, n, k 5, slip and bind, o, k 4, fagot, k 2, n, o twice, n, k 8, o, n, o, n, k 8, fagot.

Twelfth row; fagot, n, k 1, o, n, o, n, k 15, p 1, k 3, fagot, k 5, p 7, k 5, fagot, k 3.

Thirteenth row; k 3, fagot, k 5, o, n, k 3, slip and bind, o, k 5, fagot, n, o twice, n, k 11, o, n, o, k 3 tog, k 5, fagot.

Fourteenth row; fagot, n, k 1, o, n, o, n, k 15, p 1, k 1, fagot, k 6, p 5, k 6, fagot, k 3.

Fifteenth row; k 3, fagot, k 6, o, n, k 1, slip and bind, o, k 6, fagot, k 16, o, n, k 3, fagot.

Sixteenth row; fagot, n, k 1, o, k 3 tog, k 17, fagot, k 7, p 3, k 7, fagot, k 3.

Seventeenth row; k 3, fagot, k 7, o, k 3 tog, o, k 7, fagot, k 17, o, n, k 2, fagot.

Eighteenth row; fagot, n, k 19, fagot, k 17, fagot, k 3. JOYCE CAVENDISH.

**Good Things to Know**

**I**F YOU are flat-chested, a very useful exercise is shoulder raising. If the shoulders are even, they should be raised together energetically, as high as possible, and then lowered gently so as not to jar the head. If the shoulders are uneven, practice raising the lower one until both are level. To a person with weak lungs this exercise is especially beneficial.

Plenty of open-air exercise should be taken during the day by those who suffer from sleeplessness. Moderate physical fatigue tends to soothe the brain. If the trouble increases, it would be advisable to consult a doctor.

People who have little thirst will do well to make a business of drinking a certain



HEART AND SHAM-ROCK LACE

amount of hot water every day throughout the winter season. It lessens the tendency to take cold, improves the circulation, and benefits coughs and insomnia. Before going to bed is a very good time for this practice, as it warms up and relaxes the system, thus preparing the way for a good night's sleep. Many cases of indigestion, headache, neuralgia, cold hands and feet can be cured in half an hour by drinking slowly one or two glasses of water so hot that it almost burns the throat.

**TO MAKE A MUSTARD PLASTER**—If made according to the following directions it will not blister the most sensitive skin: Two teaspoonfuls mustard, two teaspoonfuls flour, two teaspoonfuls ground ginger. Do not mix too dry. Place between

two pieces of old muslin and apply. If it burns too much at first, lay an extra piece of muslin between it and the skin; as the skin becomes accustomed to the heat, take the extra piece of muslin away.

After getting the feet wet, the wisest thing to do is to remove the damp shoes and stockings as soon as possible. The feet should then be well rubbed with a rough Turkish towel till the circulation is restored, after which alcohol may be rubbed in before dry stockings are put on.

**A GOOD HINT**—Salt as a tooth-powder is worth trying. It keeps the teeth brilliantly white and the gums hard and rosy.

**FATIGUE AND DIGESTION**—Everyone should know that to eat when tired is to place upon the digestive organs a burden which they are wholly unable to bear. When the body is in a state of fatigue the digestive organs are unable to perform their natural functions; the glands of the stomach will not form gastric juice; the saliva is deficient in quantity, and the whole digestive apparatus is incapable of doing efficient work. When exhausted one should rest before eating. If a faint or sinking sensation is experienced, relief may be obtained by drinking a glass of hot water or diluted fruit juice of some kind.

**KEEP TEA AIR-TIGHT**—Tea owes its flavor to a certain fine volatile oil which is present only in very minute quantities. The fact that it is so volatile renders it necessary to keep tea in an air-tight caddy.

**TO KEEP BUTTER**—Take a basin and fill with cold water. Put the butter on a plate and put on top of the basin; then take a piece of butter muslin and put over the butter and let both ends drop into the water. You can easily get the butter for use, and you will find it is quite solid.

**CANDLESTICKS**—To clean candlesticks, whether enamel or tin, without destroying or damaging the enamel or metal, fill the candlesticks with boiling water. Without allowing it to stand for any time, pour off the water and thoroughly dry with a dry cloth. By this method both the color and substance of the candlesticks will be preserved.

**Homemade Candies**

**CREAM CANDY**—One pound XXXX sugar, white of one egg, one tablespoonful of water. Beat the white of the egg stiff and mix with the sugar and water, then knead until stiff and mold into any shape, and place English walnuts on top.

**CHOCOLATE FUDGE**—Two cupfuls of sugar, three fourths of a cupful of milk, lump of butter size of a walnut, one fourth cake of chocolate. Boil till hard in water, and run in pans till cool, then score.

**CHOCOLATE CARAMELS**—Two cupfuls of light-brown sugar, flavor two cupfuls of molasses with vanilla, one fourth cake of chocolate, one cupful of milk, a teaspoonful of butter. Boil till gets hard in water, run in pans and score.

**BUTTER SCOTCH**—Two large cupfuls of brown sugar, one half cupful of butter, one half cupful of water. Cook until hardens in cold water, then pour in buttered plates and score when hard.

**COCOANUT CANDY**—Two pounds of granulated sugar, three fourths of a cupful of water, one grated cocoanut. Boil one half the quantity of sugar and water until it forms a soft ball when dropped in water. Pour into this one half the cocoanut and beat. Pour into a pasteboard box about nine inches square lined with buttered paper. Repeat this process by boiling the rest of the water and sugar, and when done put in a little candy coloring and pour on top of first lot. When cold remove the box and cut in squares. If it is not desired to have two colors, all can be boiled at once.

**CHOCOLATE CARAMELS**—Three and one half pounds of sugar, one cake of chocolate cut fine and mixed with the sugar; put one half pound of butter to two cupfuls of rich milk into a kettle, heat to dissolve the butter; add sugar and chocolate, boil without stirring until it forms a soft ball in cold water; take off the fire and add a little vanilla and beat until cool enough to knead with the hands. Form into long rolls and cut into squares.

**LEMON DROPS**—Upon a coffee-cupful of finely powdered sugar, pour enough of lemon juice to dissolve it. Boil to a thick syrup, or until it is brittle when dropped in cold water. Drop on buttered plates and set aside to cool.

**HICKORY-NUT FUDGE**—Two cupfuls of sugar, three fourths of a cupful of milk, butter size of a walnut, one half cupful of nuts chopped fine. Try in water and pour in buttered pans.

**Sweet Pickles**

**T**HREE and one half pounds of sugar, one pint of vinegar and seven pounds of fruit are the standard proportions for all sweet pickles. Spicing is varied to suit the taste, and a tiny bit of alum added to keep the fruit firm.



The Prize Vegetables

"IF you take good care of your gardens perhaps some of the vegetables will do to take to the county fair," papa had said in the spring, when the two tiny plots were spaded; and the twins thought of what he said all summer as they worked and weeded and hoed.

"What do they do with them there?" asked two voices at once.

"If the judges decide they are the best and largest at the fair, they put on a card saying that you have won a premium or prize," explained Mr. Ransom. The twins had never been to a fair, and they were very anxious to know all about it. With their parents they had lived in a large city, and only a few weeks before had come to a farm just across from the county fair-grounds. "The premiums are sums of money paid to those having the red and blue cards. You must not count too much on winning premiums, children, for a great many people who have lived in the country for years take vegetables."

But Roy and Ruth did count on winning. They carried water to their precious gardens and did not allow a weed to shade the green crops. The soil was made very rich, and the sun and showers helped develop the seeds into live, thrifty plants. The children were delighted, but their mamma felt sure they would never give the vegetables a chance to grow because they were always working with them.

At last the great day came, and Mr. Ransom went to the office of the man in charge of the exhibits to get the cards to enter the wonderful crops from the two gardens. He came back with eight tickets and Roy and Ruth had everything ready.

"I just know there won't be another pumpkin like this," said Roy, tying a card on the great yellow monster that he had washed and polished till it shone. "My beets are beauties, too."

"I feel very sure my peppers will take first prize," said Ruth, admiring the red and golden and green pods picked from the vines in her garden a few hours before. "I am not so sure about my tomatoes, for papa thinks there will be lots of them, but I hope I will get one premium at least."

The children liked the fine cattle and horses in the many stalls at the fair-ground, but they enjoyed the vegetable hall more than anything else. The long rows and rows of all sorts of garden products made them feel it would be a great honor to win even one prize, and they looked anxiously for their vegetables.

"Here they are!" cried Roy, pointing them out in a corner with a few other vegetables. "I think it's mean to stick them 'way over here."

"Don't cry, Ruthie," said their papa. "I will speak to the man who has charge of the hall and ask him to put your things over with the rest."

"Just you wait a minute, little folks," said the man kindly. "Watch what these gentlemen do!"

"Only these few exhibits by children under twelve years of age?" said one of the committee, coming toward the corner where the twins were standing. "At this rate everything will get a premium."

Breathlessly Roy and Ruth watched them quickly tie on red cards and hurry to the next department. "You see, you are the only children to exhibit vegetables, so you had to take the premiums," explained the man in the vegetable hall. "The prizes are only twenty-five cents each."

"I don't care," said Roy stoutly. "I wish they'd say my pumpkin is the best in the hall, but it is, and I'm satisfied."

"It is the best," said one of the committee, "and we'd like to give it two premiums if we could. Keep on, sonny, and you'll be a great farmer some day."

HILDA RICHMOND.

A Bedtime Story

ONE warm afternoon Snuggly thought he would take a little swimming lesson all alone and without permission, just to prove that he wasn't afraid. So off he went, and thinking it would be fun to wade about in the shallow water, pushing the boat in front of him, he put his clothing in the boat, and began pushing and splashing and having great sport all by himself. Snuggly felt safe and confident with his hands gripped on the end of the boat as he pushed it along where the water wasn't deep, until he suddenly found his footing gone and his head pulled under water in spite of his tight grip on the stern of the skiff.

While drifting, clinging and waiting to get breath, his feet touched bottom, and in his eagerness to have something to stand on once more Snuggly let go of the boat, and cautiously waded ashore, thankful to be safe on dry land again, while the boat with his clothing went floating away.

Naked and alone on the river-bank, with the prospect of losing the boat as well as his clothing, Snuggly ran along



The Young People

the shore, hoping that some friendly current would send the boat shoreward, near enough for him to wade out and get it; but after a long chase, he gave it up, and silently watched the runaway skiff, with his best suit, go floating down the stream on its way to the ocean.

At last he decided to hide in the bushes near the street that led to his home, and wait until the coast was clear. The night breeze was growing chilly, and he was

leave his wooden overcoat and make a lively run for home unseen by anyone. Just at that moment around the corner came a strolling party of monkey-hoodlums, who caught sight of the strange object in the moonlight.

Snuggly ducked his head just in time to escape a shower of green cocoanuts and stones from the crowd, who kept up the sport for several minutes, while the missiles banged and rattled against the sides of



"He was roughly handled by the monkey-officer"

glad to crawl into an empty flour-barrel. One end of the barrel was open and the other broken in, making a hole large enough to put his head through, by standing up, when he wished to look out and watch for a chance to make a break for home. Under the cover of the barrel, Snuggly moved along cautiously, stopping and ducking his head inside every time he heard a noise, until he came to an open field, and began to think he could safely

the barrel, until tired of pelting the "big turtle," the hoodlums came near, upset the barrel, and discovered the squirming monkey inside. Snuggly tried to get out, but the hoodlum-monkeys penned him in, and wild for fun, shouted, "Let's give him a ride down the hill."

The shouts of the hoodlums on the hill brought a monkey-policeman around the corner of the street just in time to meet the barrel and Snuggly rolling slowly by,

until it bumped against a post, and suddenly stopped. When the bruised, naked and dizzy Snuggly crawled out of the barrel, he was roughly seized by the monkey-officer, who thought he was one of the hoodlums, and before Snuggly could explain he was marched off to the lock-up.

About the time Snuggly was taking his roll-and-tumble ride down the hill, a fisherman-monkey came into the village with a bundle of clothing and the alarming report that some monkey-boy had probably been drowned, as he had found the clothing in an empty skiff drifting down the river miles below. The father-monkey at once recognized the suit as that of his own precious Snuggly.

The tired, sorry and almost dazed young prisoner in the lock-up had been given an old coat and blanket in which to wrap himself, and was wondering what he could do or say to convince the monkey-officer that he was Mr. Snuggleton-Monkey's only son, and not a hoodlum, when the door of his cell was opened, and he heard someone say, "Perhaps this is the young monkey for whom you are looking."

In less time than it takes to tell it, Snuggly was in his father's arms, and with much rejoicing the searching-party escorted the happy and grateful father-monkey and son to the anxious and almost broken-hearted mother at home.—J. H. JEWETT.

The Wake-Up Story

THE sun was up and the breeze was blowing, and the five chicks and four geese and the three rabbits and two kitties and one little dog were just as noisy and lively as they knew how to be.

They were all watching for Baby Ray to appear at the window, but he was still fast asleep in the little white bed, while mamma was making ready the things he would need when he should wake up.

First, she went along the orchard path as far as the old wooden pump, and said, "Good Pump, will you give me some nice, clear water for the baby's bath?" And the pump was willing.

The good old pump by the orchard path Gave nice, clear water for the baby's bath.

Then she went a little farther on the path, and stopped at the wood-pile, and said, "Good Chips, the pump has given me nice, clear water for dear little Ray; will you come and warm the water and cook his food?" And the chips were willing.

The good old pump by the orchard path Gave nice, clear water for the baby's bath, And the clean, white chips from the pile of wood Were glad to warm it and cook his food.

So mamma went on till she came to the barn, and then said, "Good Cow, the pump has given me nice, clear water and the wood-pile has given me clean, white chips for dear little Ray; will you give me some warm, rich milk?" And the cow was willing.

Then she said to the top-knot hen that was scratching in the straw, "Good Biddy, the pump has given me nice, clear water, and the wood-pile has given me clean, white chips, and the cow has given me warm, rich milk for dear little Ray; will you give me a new-laid egg?" And the hen was willing.

The good old pump by the orchard path Gave nice, clear water for the baby's bath, And the clean, white chips from the pile of wood Were glad to warm it and cook his food; The cow gave milk in the milk-pail bright, And the top-knot Biddy an egg new and white.

Then mamma went on till she came to the orchard, and said to a Red June apple tree, "Good Tree, the pump has given me nice, clear water, and the wood-pile has given me clean, white chips, and the cow has given me warm, rich milk, and the hen has given me a new-laid egg for dear little Ray; will you give me a pretty red apple?" And the tree was willing.

So mamma took the apple and the egg and the milk and the chips and the water to the house, and there was Baby Ray in his nightgown looking out of the window.

And she kissed him and bathed him and dressed him, and while she brushed and curled his soft, brown hair, she told him the wake-up story that I am telling you.

The good old pump by the orchard path Gave nice, clear water for the baby's bath; The clean, white chips from the pile of wood

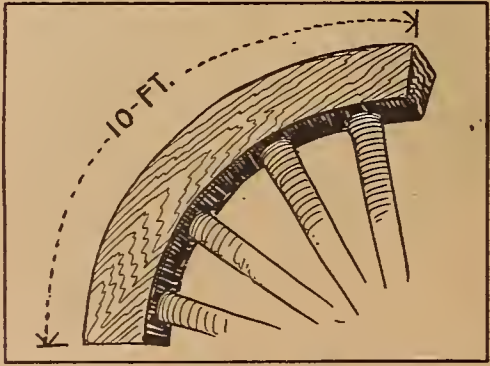
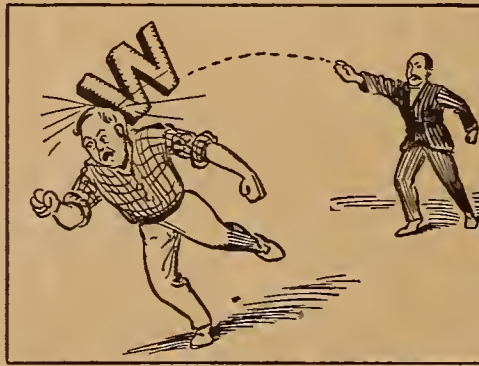
Were glad to warm it and cook his food; The cow gave milk in the milk-pail bright, And the top-knot Biddy an egg new and white;

And the tree gave an apple so round and so red,

For dear little Ray, who was just out of bed. —Eudora Bumstead in Western Christian Advocate.

The Puzzler

If Poetry Has a Charm for You, and You Have Read Little or Much of It, it is Altogether Likely that the Works of Some or All of the Six Well-Known Poets Represented in the Pictures Below Have Entertained You. Do the Drawings Reveal to You Their Names?



The following is the solution of Rebus published in the July 1st issue: There are two great holidays in the year, but the greatest of them is our own Independence Day. Some holidays belong to the whole world, but the Fourth of July is only for Americans. The more noise that can be made the better the boys and girls enjoy it. The Stars and Stripes will be 130 years old this year.





Sunday Reading

Rich Without Money

**P**OVERTY is largely a matter of fancy. The real poverty is in the mind—in the mind's attitude. There is such a thing as being rich without money. That man is rich whose mind is rich, whose heart is rich, who is rich in integrity, and who has that best of all blessings, a contented mind—Christian contentment. This last great boon is gained through making the most of our little enjoyments, through making the least of our little lacks, through doing our best with our little duties—through trusting in God and doing the right. To be sure, we cannot all be money rich. Some money-rich people are very poor. But we can all be millionaires of character and of faith, possessing that "godliness" which, with "contentment," is a great gain, the real gain, the highest riches—Rev. G. B. F. Hallock, D. D.

Plowing Around a Rock

**"I** HAD plowed around a rock in one of my fields for five years," said a farmer to a writer in "The Advance," "and I had broken a mowing-machine knife against it, besides losing the use of the ground in which it lay, because I supposed it was such a large rock that it would take too much time and labor to remove it. But to-day, when I began to plow for corn, I thought that by and by I might break my cultivator against that rock; so I took a crowbar, intending to poke around it, and find out its size once for all. And it was one of the surprises of my life to find that it was a little more than two feet long. It was standing on its edge, and was so light that I could lift it into the wagon without help."

"The first time you really faced your trouble you conquered it," I replied aloud, but continued to enlarge upon the subject all to myself, for I do believe that before we pray, or better, while we pray, we should look our troubles square in the face.

"Imagine the farmer plowing around that rock for five years, praying all the while, 'O Lord, remove that rock!' when he didn't know whether it was a big rock or a little flat stone!

"We shiver and shake and shrink, and sometimes do not dare to pray about a trouble because it makes it seem so real, not even knowing what we wish the Lord to do about it, when if we would face the trouble and call it by its name one half of its terror would be gone.

"The trouble that lies down with us at night, and confronts us on first waking in the morning, is not the trouble that we have faced, but the trouble whose proportions we do not know.

"Let us not allow our unmapped trouble to make barren the years of our lives; but may we face it, and with God's help work out our own salvation through it."

The Rest Which Comes from Christ

**T**HE rest which comes from Christ is inner, and independent of all outer circumstances. It does not depend upon the weather to be happy. An east wind does not affect it. It does not depend upon fine clothes, not even upon clothes at all, for its warmth. Its position in life, its job of work, seem to have no connection with it at all. It exists irrespective of its friends or of its enemies. Heat does not expand it; cold does not contract it. It is not subject to temperature like iron and happiness. It does not have its roots in a bank vault, neither does it grow better in dirt. It is unaffected by the dark of prison cells or by the light of noonday. The one cannot bleach it, the other cannot wither it. It is not swelled by wet, nor cracked by drought. It does not have to go to the circus before it can laugh, neither does a funeral fill it with despair. It can look up through the shining holes in the sky by night and into the yawning graves of earth by day with equal serenity. It does not have to go to the concert-hall to sing, nor does discord make it gnash its teeth. It is not the characteristic of youth any more than it is of age. It does not feed upon flattery, nor is it dependent upon fame for its life. It does not have to be soaked in the water of affliction like a tub before it will hold what God intended. Neither can success fill it so full that it bursts its bands. The falling off of friends causes no diminution of itself. The loss of property does not lessen it a grain. The increase of goods does not add to its weight nor to its size. The depth of its wells and of its mines does not increase its depth. The breadth of its acres does not widen its smile. This rest does not

seem to be able to be bought. Nor can it be sold. It has never yet been measured, largely because earth has no meter sublime enough. It has never been weighed, because man has no scales with beam long enough. This rest may be found anywhere; but it is actually found in a few isolated places. While it is always within, yet it often works out and enters men's actions and products. While it cannot be seen, its influence can be felt everywhere; and life and deed take on the molding of its touch. This rest passes understanding, and yet men of learning often pass it by. It can be felt by fools, and many of them become wise by it. Its absence will make youth old beyond its years; its presence will make age perennially young. The man who would have it must cease tinkering with outer circumstances to find it. He must go to the Source, and drink to quench his thirst, as he would to any other fountain.—Rev. W. Y. Davis, in the Optimist.

Substantial Prayers Avail Much

**T**HE apostle James says, "The effectual, fervent prayer of a righteous man availeth much."

It might also be well said: "The substantial prayers of a practical, generous man avail much in times of need," as the following, on "Prayer and Works," published in "Five Hundred Scriptural Anecdotes," illustrates: "A poor man who had a large family gave them a comfortable support while he was in health. He broke his leg and was laid up for some weeks. As he would be for some time destitute of the means of grace, it was proposed to hold a prayer-meeting at his house. The meeting was led by Deacon Brown. A lad knocked at the door, interrupting the service. A tall, lank youngster stood at the door, with an ox-goad in his hand, and asked to see Deacon Brown. 'Father could not attend the meeting,' he said, 'but he sent his prayers, and they are out in the cart.' They were brought in, consisting of potatoes, pork, beef and corn. The meeting broke up without the benediction, nor did the poor fellow and his family suffer any more for want of food. The substantial, timely prayers of the deacon became a means of grace."—Religious Telescope.

Use It All

**L**ET us never lose a fragment of time; let us never pass over a particle of an hour, and especially when, at the close of life, we approach the eleventh hour let us not lose one moment of it. Like the workman who sits down to rest at the fall of night, and whose face is lit up by the light of his fire, let us make with the shavings of our days a treasure of tenderness, of justice, of kindness, of humanity, of eternity, with the shavings of our days let us make light.—Author unknown.

The Owners of the Soil

**T**HE man who stands upon his own soil, who feels that, by the law of the land in which he lives, he is the rightful and exclusive owner of the land which he tills, feels more strongly than another the character of a man as the lord of an inanimate world. Of this great and wonderful sphere, which, fashioned by the hand of God, and upheld by his power, is rolling through the heavens, a part is his—his from the center to the sky! It is the space on which the generation before moved in its round of duties, and he feels himself connected by a visible link with those who follow him, and to whom he is to transmit a home.

Perhaps his farm has come down to him from his fathers. They have gone to their last home; but he can trace their footsteps over the scenes of his daily labors. The roof which shelters him was reared by those to whom he owes his being. Some interesting domestic tradition is connected with every enclosure. The favorite fruit-tree was planted by his father's hand. He sported in boyhood beside the brook which still winds through the meadow. Through the field lies the path to the village school of earlier days. He still hears from the window the voice of the Sabbath-bell, which called his fathers to the house of God; and near at hand is the spot where his parents lay down to rest, and where, when his time has come, he shall be laid by his children.

These are the feelings of the owners of the soil. Words cannot paint them—gold cannot buy them; they flow out of the deepest fountains of the heart; they are the very life-springs of a fresh, healthy and generous national character.—Edward Everett.

Let Me Prove to You, at My Expense That a CHATHAM Fanning Mill Makes Your Grain Crop Worth More Money

To prove that the Chatham Fanning Mill will get you full value for every sound kernel of grain you raise, we will allow you to use one a month FREE.

Send at once for our little book "How to Make Dollars Out of Wind." We will forward it by return mail, postpaid, and quote you a special price on a Chatham Fanning Mill.

Then—when you are through wondering how we can sell so good a machine for so little money—send us an order for a FREE test.

We will ship you a Mill, all charges prepaid, and you can use it a month on your own farm to see what it will do.

And, if you are not thoroughly convinced that it is exactly as represented, you can send it back at our expense, and the test won't cost you anything.

We have had 25 years experience making Fanning Mills and own two of the largest factories in America.

Our offer is made in good faith and any Commercial Agency or any Bank in Detroit will tell you of our responsibility.

Send at once for our liberal proposition and get a Chatham Fanning Mill to saving for you as quickly as possible.

It will grade all your grain so you can get "first price" for it.

It will take all the chaff, weed-seed and

withered kernels out of your grain. It will take cockle out of wheat, separate oats from wheat or any one kind of grain from all others.

If you own a Chatham Fanning Mill, you can sell seed-grain to other people instead of buying it yourself.

With "A Chatham" you can clean Corn, Rye, Barley, Wheat, Oats, Timothy, Clover, Millet, Flax, Rice, Peas, Beans, Kaffir Corn, Potatoes, Broom Corn, Alfalfa, Grass

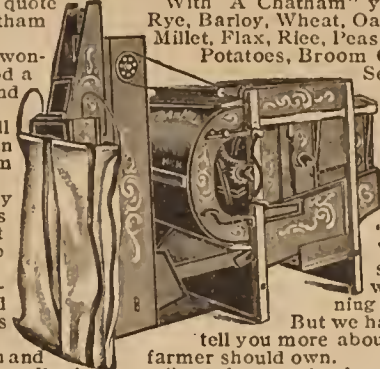
Seed, Cotton Seed, Alsike, Blue Grass, Red Top, Buckwheat, Hungarian, Orchard Grass, Rape, Rye Grass and everything of this kind.

You do not get "mixed crops" nor "soy weeds" if your seed-grain is cleaned with a Chatham Fanning Mill.

But we haven't room here to tell you more about this mill that every farmer should own.

Send for our book at once and get the whole story with our FREE trial offer.

Let us tell you the many different ways a Chatham Fanning Mill puts dollars into your pocket. We ship from one of our nearest branch warehouses. We have one in all leading trade centers in the different states. This gives prompt delivery. Write us today.



The Manson Campbell Co., Ltd. 362 Wesson Avenue Detroit, Mich



EXACT SIZE GUARANTEED HERE'S A CHANCE—SNAP IT UP

BOYS

**Movement** Regular sixteen size, and only three eighths of an inch in thickness. Lantern pinions (smallest ever made). American lever escapement, polished spring. Weight, complete with case, only three ounces. Quick train—two hundred and forty beats a minute. Short wind; runs thirty to thirty-six hours with one winding. Tested, timed and regulated. This watch is guaranteed by the maker for a period of one year.

**The Guarantee** In every watch will be found a printed guarantee, by which the manufacturers agree that if without misuse the watch fails to keep good time within one year they will repair it free of charge, and return it. **DESCRIPTION**—Plain center hand, elegant nickel case, snap back, Roman dial, stem wind, stem set, medium size, oxidized movement plate, open face. Engraved front and back.

How to Get the Watch

Send us your name and address on a postal card to-day, and ask for a book of eight coupons, and say you want the watch.

We will send by return mail a book containing eight coupons, each one of which is good for a year's subscription to Farm and Fireside, one of the best farm and home papers published in America. Comes twice a month. We will also send a sample copy of the paper so you can judge of its merits for yourself. You sell these coupons to your friends and neighbors at 25 cents each. When the coupons are sold, you send the \$2.00 to us, and we will send you the watch.

It is easy to sell the coupons. Thousands have earned watches by our plan, and you can do it in one day's time. Write to-day. Be sure to ask for a book of eight coupons.

FARM AND FIRESIDE SPRINGFIELD, OHIO

Repeating Air-Rifle Free

SHOOTS 300 TIMES WITH ONE LOADING THE IDEAL GUN FOR BOYS

A TRUE SHOOTER Boys have use for it every minute—hunting in the woods, shooting at targets, drilling as soldiers, and hundreds of uses that only boys know about.

Harmless, strong, durable, shoots accurately, and cultivates truthness of sight and evenness of nerve.

It is extremely simple in construction. Any child can operate it and become an expert marksman with little practice.

It gives the boy healthful pleasure, and lots of it for the money.

This rifle uses no powder—just air. There is no smoke, no noise.

Air is plentiful, and shot costs but 10 cents for 1,000, while darts can be shot over and over again.

Harmless, and lasting for years—no wonder every boy should want an air-rifle.

Expert workmanship and accurate machinery enable the manufacturers to produce an air-rifle of which all parts are interchangeable.

These air-rifles are provided with pistol-grip, true sights, and so strongly made that it is almost impossible for them to get out of order.

HOW TO GET IT

Send us your name and address on a postal-card to-day, and tell us you want to get the air-rifle. We will send by return mail a receipt-book containing eight coupons, each one of which is good for a year's subscription to one of the best farm and home papers published in America. We will also send a sample copy of the paper, so you can judge of its merit for yourself.

You sell these coupons to your friends and neighbors at 25 cents each. They will gladly take advantage of a chance to get a good paper one year for 25 cents. When the coupons are sold, you send the \$2.00 to us, and we will forward the rifle. If you don't want a rifle, perhaps you know of some boy or girl who would like to earn a rifle. If so, send us their name and address, and we will send a receipt-book by return mail. Hundreds have earned rifles by our plan, and you can do it in one day's time. Write to-day

Address FARM AND FIRESIDE, Springfield, Ohio

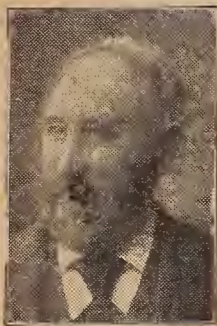




## Rare Collection of Indian Relics

PROBABLY no other banking-room in the world has its walls decorated in such a unique manner as that found in the village of Kingston, one hour out from Chicago, on the Omaha line of the St. Paul road. Indian arrow-heads, almost entirely, was the material used to accomplish the designs shown in the picture.

The bank is that of Marcus W. Cole, and the work was done by his daughter, who is the wife of Judge Pond, of DeKalb, Illinois.



MARCUS W. COLE

Mr. Cole has collected perhaps the largest number and the greatest variety of arrow-heads and other Indian relics that is to be found in the Middle West. He has picked up from the prairies, his friends have given him, and he

has bought small collections until he has no less than 15,000 arrow-heads that represent probably twenty-five different states in the union.

The north wall of the banking-room is almost entirely covered with these Indian-fashioned flint stones. Mrs. Pond covered sheets of corrugated board with black muslin and then with needle and thread she fastened each stone into place to make the many different designs shown in the picture. It will be easy for the reader to find a tomahawk, tepee, canoe, Indian head, fern leaf, anchor, bow and arrow, and some other things that are appropriate in such a design. After all of the boards were arranged with the heads fashioned into the different designs, they were fastened to the walls, and the effect is shown in the picture.

This odd display has been witnessed by thousands of people, but every room in the Cole residence, which adjoins the bank, must be visited to see the wonderful work that Mr. Cole has accomplished. There is an Indian relic collection in every room of the house. There is a valuable collection of gorgets and ceremonial stones. The pestles and grinding stones number nearly two hundred pieces, some of them very rare. The Smithsonian Institution at Washington has expressed some opinions on a number of the finds, and an attempt was made to secure some of them for that institution, but Mr. Cole will not part with any of them at any price.

Kingston is located in DeKalb County, and there is probably the largest number of Indian relic hunters in this county than in any other in northern Illinois. Besides Mr. Cole, Jacob Heckman, A. S. Gibbs, H. H. Holroyd, all of Kingston, have good collections, and H. W. Fay, of DeKalb, has furnished the museum of one of the state school institutions with this class of relics. There are no less than fifty painstaking arrow-head hunters living in the city of DeKalb.

Mr. Heckman in a single afternoon explored five Indian mounds in Wisconsin, discovering some very rare and valuable articles, among them some implements made of tempered copper, which shows that the red man was in possession of the secret that is bothering scientists to-day. Heckman and Mr. Cole spent a month in Tennessee and brought up a large number of interesting things.

FARM AND FIRESIDE not long since printed a story and picture about the work of Mr. and Mrs. Hofenrichter, of Yorkville. The field in which they gathered their relics is but a short distance removed from the region in which the DeKalb County hunters have made so many valuable finds.

J. L. GRAFF.

## A Balloon Railway

ENGINEER BALDERAUER, of Salzburg, has invented a balloon railroad, experiments with which are now being made in the neighborhood of that German city. A stationary balloon is fastened to a slide running along a single rail fastened to the side of a steep mountain which ordinary railroads could not climb. The balloon is to float thirty-five feet over the ground, and a steel cable connects it with the rail. For going up, motive power is furnished by hydrogen gas, while water poured into a large tank at the upper end of the road serves as ballast for the descent. Suspended from the balloon is a circular car with room for ten passengers.

## Farmers' Barometers

IF CHICKWEED and scarlet pimpernel expand their tiny petals, rain need not be expected for a few hours, says a writer. Bees work with redoubled energy just before a rain.



## Of Curious Interest

We shall be glad to receive contributions to this page, and will pay for such as are accepted

If flies are unusually persistent either in the house or around the stock, there is rain in the air.

The cricket sings at the approach of cold weather.

Squirrels store a large supply of nuts, the husks of corn are unusually thick, and the buds of deciduous trees have a firmer protecting coat if a severe winter is at hand.

Corn fodder is extremely sensitive to hygrometric changes. When dry and crisp, it indicates fair weather; when damp and limp, look out for rain.

A bee was never caught in a shower;

too much indeed to pay for being made over into a fright.

And to-day another achievement is reported: the successful grafting of blood vessels. In this scheme veins can be attached to arteries at new points, so that tumors or congested or injured parts may be starved out; or, if an organ is suffering for an adequate supply it can be generated. Not only this, but displaced organs can be restored to position, or can be shifted about—a startling device, since a man might come out of his ether sleep to discover his kidneys where his stomach used to be. Organs from other animals

can be fastened to the human subject. Even softening of the brain can be arrested by turning a strong arterial current into the weakened structure.

## Smallest Inhabited Island

JETHOU ISLAND is by far the smallest of the Channel islands, and boasts the distinction of being the smallest inhabited island in Europe, having, indeed, only one dwelling-house upon it. The Kansas City "Journal" says that it has a population of about seven souls, that it has no road, or pathway or post, and that at the last census more than half the population of the island was absent, having gone into Guernsey market with the butter and cream from the Jethou cows. The weather became bad and the visitors had to remain at Guernsey during the census time.

## Fishes Travel Over Land

THE variety of perch in Asia will desert failing streams and travel over dry ground in search of better water-courses. This fish is known as the climbing perch. Ofttimes hundreds of them have been seen at a distance of fifty or sixty yards from a stream just abandoned.

Some writers even assert that this fish is capable of climbing the rough stems of palm-trees. The fishermen of the Ganges, who subsist largely on climbing perch, are accustomed to keep them in dry earthen pans for five or six days after catching, and they live this strange life without discomfort.

## Silver Pig Offering

THERE is preserved in the Cathedral of La Paz, in South America, a silver pig, with jeweled eyes, and the whole being a thank offering made long years ago

by a pious Spanish house inspector, who had been led to stumble across what proved to be an exceedingly valuable silver mine, owing to preliminary investigations that had been carried out by an inquisitive sow.

## Gas from Cocoanuts

THE latest illuminant is gas from cocoanuts. The coal of the Philippines being unsuitable for gas-making purposes, the government has been experimenting in the laboratories, and has found that a gas of great illuminating power may be produced by a very simple method from coconut oil. The oil is slowly fed into retorts which are already red-hot. Here it volatilizes very rapidly, leaving a small residue of tar. Bulk for bulk, the oil has a much greater productiveness in gas than coal, and for this reason it is expected that if the supply can be made to meet the demand, it will be greatly used all along the Pacific coast.

## The Russian Douma

DURING the recesses the lobby of the Douma is an interesting study; a more democratic gathering would be hard to find. One sees the peasant deputy in his long coat and high boots walking with the land proprietor. Workmen, professors, gentry mingle together. The orthodox priests with their long hair and heavy beards sit and smoke cigarettes with the others. The Tartar delegates from Kazan wear the small skull cap on their shaven heads. The peasants from Little Russia and Poland are in their national dress, for there is to be no more forced Russification. A Catholic priest and the Archbishop of Warsaw add another variety. And all these classes gather around the tables in the restaurants and tea-rooms, each eager to expound his opinion. The peasants are a little loath to visit the refreshment rooms where one has to pay five cents for a cup of tea. One peasant was asked if he was enjoying himself with his five dollars a day. He frankly replied that he was sending \$4.50 home each day.

It has been interesting to talk with these peasant deputies. Some are simple, genuine *mushiks*, uneducated, perhaps, but not ignorant. One peasant surprised me by reminding me of the help Russia had given America on one occasion.

The answer to the throne speech explains the whole political situation in Russia more clearly than any document. It is addressed to the people as well as to the czar. It states what the representatives of the people expect from the emperor, what they are ready to do for those whom they represent. It gives an idea of the general temper of the Douma. That may not be the temper of the country. But the Douma is the only voice the country has at present. The answer may appear radical in its demands, but the general feeling, especially in the provinces, is even more radical.—A Russian correspondent in the World To-day, for July.

## Houses of Whalebone

RECENTLY there was on the Lancashire coast of England a cottage and boat-house that were made almost entirely from the remains of whales that had been driven ashore some years before. The framework of the structures consisted wholly of whalebone, and the dried skins of the huge creatures were neatly and strongly fastened as a covering for walls and roof. There is another building of exactly the same kind in Scotland.



VARIETY OF INDIAN RELICS IN COLE HOME AT KINGSTON, ILL.

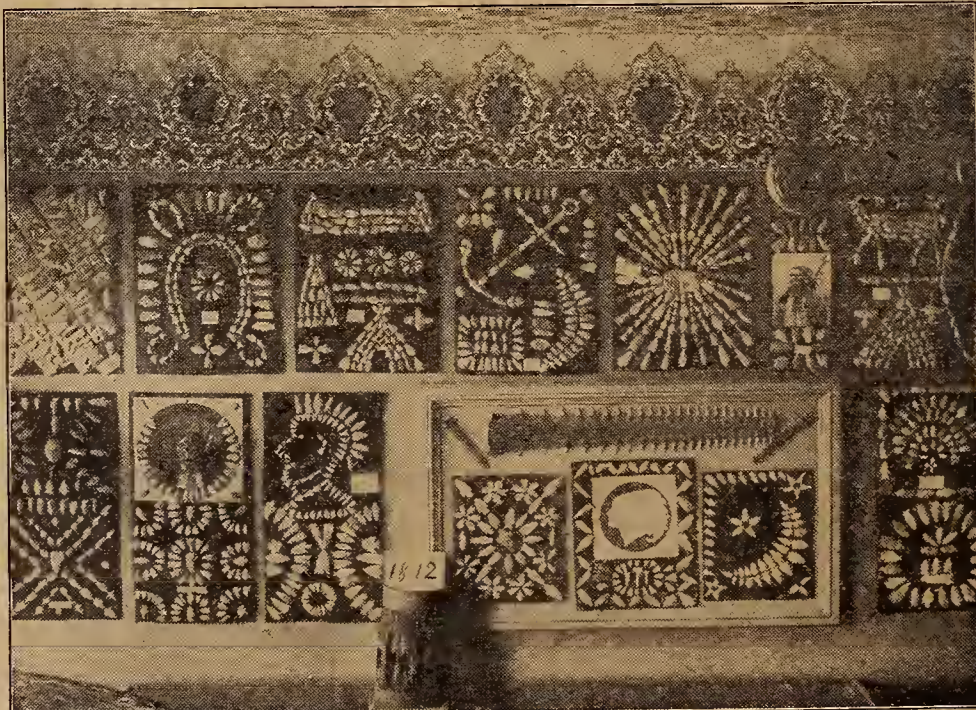
therefore, when his bees leave their hive in search of honey, the farmer knows that the weather is going to be good.—Scrap Book.

## Indiana's Oldest Justice

THOMAS B. YOUNGBLOOD, of Boonville, the oldest justice of the peace in Indiana, will soon celebrate his eightieth birthday. The justice has made himself famous for marrying couples in queer places, and he has even married a couple having the smallpox, which required that the justice stand across the road and pronounce them man and wife. United States Senator James A. Hemenway has had many cases before Justice Youngblood, and when he was prosecuting attorney of the second judicial district he prosecuted many cases in the justice's court.

## Wonders of Surgery

ALMOST every day new surgery lends more astonishment to an interested world. The Brooklyn "Eagle" tells that people who are doddering into their second century are afraid that if processes and discoveries are not stopped before long there will be no way in which they can die, at least peacefully. They cannot even be allowed to look elderly. Only a day or two ago it was discovered that you could make all sorts of incisions in the surface of a fellow-creature and leave no trace of that benefit, because by cutting the skin at an angle, instead of vertically, the edges could thereafter be joined without a scar. People can now run to the beauty doctor and have their noses readjusted, and their chins collected with little fear of the consequence, unless they use those blistering salves that have got so many of the beauty doctors into lawsuits. A woman does not mind paying a good price to be made lovely, but it is asking



BANKING-ROOM DECORATED WITH ARROW-HEADS

The hub shown in this picture is that of an army wagon that was surrendered by Hull, at Detroit, in 1812. It was sold by the British and brought west by one Lucas, who settled in Ogle County in 1835



# A PRIZE GIVEN TO EVERY PERSON THAT ENTERED OUR GREAT FARM AND FIRESIDE PONY CONTEST WHICH CLOSED JUNE 15, 1906

## The Result of the Contest

The great FARM AND FIRESIDE Pony contest closed, as advertised, on June 15, 1906. The result has been most satisfactory, not only to the publishers of FARM AND FIRESIDE, but to every person that entered and contested for the magnificent prizes that were offered. FARM AND FIRESIDE has an enviable reputation which it has enjoyed for nearly thirty years of doing exactly as it agrees. Some of the greatest free-prize contests ever conducted by any publication in the world have been given by FARM AND FIRESIDE during the past twenty-five years, and the most wonderful part of it all is that there has never been a single dissatisfied person in all this time, which simply bears out the above policy of "fair-and-square dealing" with all.

All persons who entered this great contest which has just come to a close, received a cash commission on each and every subscription which they sent in, enough to pay them well for all the effort it required, but in addition to this generous cash commission each person who sent ten or more subscriptions received a handsome prize. Never before has such a liberal contest been given. A large number of the prizes—as stated in the conditions of the contest—were selected by the publishers themselves and sent free of all charge to the various contestants. Each and every prize was a valuable one, so that there might be no dissatisfaction on the part of any of the contestants.

There is, it is said, more pleasure in giving than receiving, and the publishers of FARM AND FIRESIDE never had this truth brought home to them more emphatically than in this present contest, as the hundreds of letters from pleased contestants will verify. It was a great pleasure to read the letters as they came in from the prize winners expressing their joy and appreciation of the presents which they received. Many sent their photographs taken in their most happy moods to show how pleased they were. It has been said that "all's well that ends well." Surely this great contest has "ended well."

We are now planning another prize contest for FARM AND FIRESIDE readers that will surely eclipse anything of its kind in the annals of free-prize offers. We cannot determine now just when this great contest will be given out, but we can promise you that unless the unforeseen happens we will put it on within the next few months, so watch out for the announcement.



**MISS VIVA McNUTT, VANDERGRIFT, PA.**  
Winner of First Prize—The Pony, Carriage, Harness

## Other Leading Prize Winners

**Master Marinus Riter, Paterson, N. J.**  
Second Prize—Victor Talking Machine

**Holland B. Alexander, Dixon Springs, Tenn.**  
Third Prize—A Valuable Swiss Music-Box

**Perley Petty, St. Johnsbury, Vt.**  
Fourth Prize—Genuine Gold Watch

**Charlotte E. Carter, Berryville, Va.**  
Fifth Prize—High-Grade Camera

**Russell Kochinsparger, Junction City, Ohio**  
Sixth Prize—Diamond Ring

All other contestants received prizes selected by the publishers, graded by the number of subscriptions sent

## The Distribution of the Prizes

The prizes were all sent to the persons entitled to them just as fast as they could be gotten out. The pony was shipped by fast express to Miss McNutt on Monday, June 25th, and the carriage and harness were sent a little later. The most stupendous task of all developed when the time came for the publishers to select suitable prizes for the other contestants, besides those who won the first six prizes, as advertised. But finally the work was finished and every contestant who sent ten or more subscriptions to FARM AND FIRESIDE had been awarded a prize. The value of the prizes depended upon the number of subscriptions each person sent in during the contest. But each prize was something handsome and valuable and a good reward for the work done, and it is evident from the appreciation expressed that each and every one was highly pleased with the handsome present which they received.

## Over \$2,000.00 Worth of Prizes

The combined value of the prizes distributed is placed at over two thousand dollars. The pony outfit is worth at least two hundred dollars and the other prizes ranged in value from seventy-five dollars down to one dollar. This is probably the only contest of any kind in which every contestant received a prize, regardless of the number of subscriptions which they may have sent in. It might be well to mention here that no one was entered in the contest unless ten or more subscriptions had been sent and credited in the contest.

The prizes consisted of those mentioned on this page, as the six grand prizes, and many other articles of almost every conceivable description. The committee in charge of the awarding of the other prizes tried to select some one thing which they thought would be acceptable to the person to whom it was sent, and please him.

It was indeed a difficult piece of work to select so many prizes for so many different people and try to please them all, but it is very evident from all sources that everyone who entered the contest is highly pleased with the results and with the fair-and-square treatment accorded to all. The publishers of FARM AND FIRESIDE take this opportunity to extend their best wishes to all, and cordially thank everyone who helped make the contest a success.

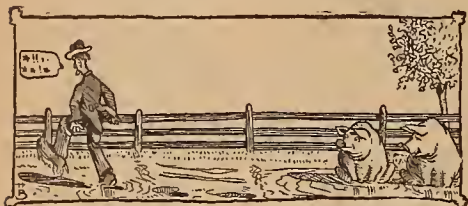


Sherman Hoar's Law

WHEN the late Sherman Hoar, a lawyer of recognized ability, left the law school and opened an office in Boston, his father, Judge Hoar, was at the height of his legal reputation.

The young man's first client was an Irishman, and the case, though only some small matter of a boundary line, was one that required the examination of a number of deeds and records. Mr. Hoar accordingly told his client to come back in two days for his opinion.

The Irishman left the office, evidently



First Pig—"Just listen to the way that man is talking about these roads. Why, I think they're just elegant, don't you?"

Second Pig—"Yes, I never saw them in a better condition."

very reluctant at the delay. Turning at the door, he asked: "Couldn't ye give me the answer to-morrow, Misther Hoar?"

"No, no," was the reply; "come on Thursday."

The client went as far as the stairs. Then he turned and tiptoed back to the door and put his head inside, with a finger at his lips.

"Whist!" he whispered. "Couldn't ye get to see your father to-night, Misther Hoar?"—Boston Herald.

From Arkansas

On a morning early in spring, a stranger drove up to a Texas country store.

"Any land about here for rent?" inquired the stranger of the merchant.

"I know of none just now," replied the merchant. "Call in the morning. Perhaps I shall learn of some by then."

"Thank you. I shall camp at the spring down there and return to-morrow."

"Where are you from, stranger?"

"I am from Arkansas."

"From Arkansas?"

"Yes."

"Now, my friend, I like your looks; you have a good wagon and horses; and I would like to see you get land here. But do not tell these people you are from Arkansas."

"Why, what's the matter with Arkansas?"

"Arkansas is all right, but these people think everything is bad that comes from Arkansas. Just tell them you are from Missouri, and you will have no trouble getting all the land you want."

The stranger drove to the spring, staked his horses, and prepared his supper.

Presently there came a visitor, a man from the neighborhood.

"Hello, stranger," he said.

"Hello."

"Where do you hail from, stranger?"

"I am from Missouri."

"From Missouri? What county?"

"Washington County."

"Do you know Parson Hicks?"

"Parson Hicks? I've known him all my life."

"When did you see him last?"

"About three weeks ago. Saw him just before I left."

Neighbor No. 2 came up at this time and addressed the stranger.

"Good-looking horses, stranger. Where might you be from?"

"From Missouri."

"What county?"

"Washington County."

"Do you know Parson Hicks?"

"Yes, I am well acquainted with Parson Hicks. He is a fine fellow."

At this juncture neighbor No. 3 appeared.

"Good-evening, stranger."

"Good-evening, sir."

"Seems you are a newcomer."

"Yes."

"Where are you from?"

"From Missouri."

"What county?"

"From Washington County."

"From Washington County? Well, do you know Parson Hicks?"

"Parson Hicks is one of our old neighbors."

"When did you hear him preach last?"

"I heard him preach the Sunday before I left. He is a fine preacher."

"Now, come, stranger! That won't do! Parson Hicks has been here for ten years."

The stranger arose, pulled off his coat, and said:

"I'm from Arkansas and I can whip any man that doesn't like it!"

There was a quick dissolution of that crowd. Before morning the stranger had gone.

J. C. B.



Wit and Humor



Cause and Effect

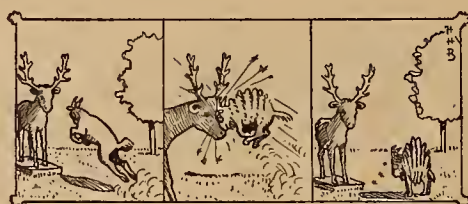
A theological student was sent one Sunday to supply a vacant pulpit in a Connecticut valley town. A few days after he received a copy of the weekly paper of that place with the following item marked: "Rev. ———, of the senior class at Yale Seminary, supplied the pulpit at the Congregational Church last Sunday, and the church will now be closed three weeks for repairs."—Cleveland Leader.

Sabbath-School Echoes

A superintendent asked his school why Moses was hidden in the bulrushes by his mother, and one of the little boys answered that it was because she "didn't want him to be vaccinated."

A little English girl defined a miracle as "a thing that happens in America."

A little boy out West defined "sins of omission" as "sins you ought to have committed, but didn't."



The jealous goat to a statue—"Get out of here!" (A moment later)—"I guess I've made a mistake"

"Why does not God strike dead everybody that lies, the same as he did Ananias and Saphira?" asked a Scotch preacher who was examining the school. "Because sir, there wouldna be onyone left," replied one of them.

The question having been asked what kind of bird was sent out from the ark, was answered ("A dove") only by the smallest boy in school. The superintendent

expressed surprise at this, but another boy said, "Please, sir, his father keeps a bird-store."—Will Carleton's Magazine.



Agent—"Now, sir, this book—" Busy man—"Aint got no use for it." Agent—"Oh yes, you have. Look at the title of it—" "The Art of Conversation and Correct Speech."

At the International Sunday-school Convention at Louisville, Kentucky, in answer to the roll-call of states, reports were verbally given by the various state chairmen. When the Lone Star State was called a brawny specimen of Southern manhood stepped out into the aisle and with strident voice exclaimed: "We represent the great state of Texas. The first white woman born in Texas is still living—she now has a population of over three million."

There was a pause of bewilderment for a moment, and then a voice from the gallery rang out clear and distinct:

"Send that woman out to Wyoming—we need her."—Everybody's.

Striking Ignorance

It was visiting day at the kindergarten, and the young teacher was proud of her little pupils as they went through their drills and exercises, and beamed with pleasure at the appreciation shown by the visitors, who applauded generously. Then came the lesson, and the teacher announced the subject.

"Children," she said, "to-day we are going to learn about the cat, and I want

you to tell me what you know about it. Tommy, how many legs has the cat?"

"Four," replied Tommy, proudly conscious of rectitude.

"Yes, and, Daisy, what else has the cat?"

"Claws an' tail," murmured Daisy, shyly.

Various other portions of feline anatomy were ascertained, and finally the instructress turned to one of the latest acquisitions of the kindergarten and said, sweetly:

"Now, Mary, can you tell me whether the cat has fur or feathers?"

With scorn and contempt, mingled with a vast surprise, Mary said:

"Gee, teacher, ain't you never seen a cat?"

And the lesson came to an abrupt end.—Buffalo Evening News.

Not the Limit

Two gentlemen were traveling in one of the hill counties of Kentucky not long ago, bound on exploration for pitch pine. They had been driving for two hours without encountering a human being, when they came in sight of a cabin in a clearing. It was very still. The hogs lay where they had fallen, the thin claybank mule grazed round and round in a neat circle, to save the trouble of walking, and one lean, lank man, whose garments were the color of the claybank mule, leaned against a tree and let time roll by.



Mother (catching son in preserves)—"It's you, is it? I thought it was burglars." Son (nervously)—"I thought so too, m'om, and I was just looking for them."

"Wonder if he can speak?" said one traveler to the other.

"Try him," said his companion.

The two approached the man, whose yellowish eyes regarded them without apparent curiosity.

"How do you do?" said the Northerner.

"Howdy?" remarked the Southerner, languidly.

"Pleasant country."

"Fur them thet likes it."

"Lived here all your life?"

The Southerner spat pensively in the dust.

"Not yit," he said.—Reader Magazine.

A Good Fish-Line, Too

"Now, boys, what is the axis of the earth?"

"The axis of the earth," said Johnny, "is an imaginary line which passes from one pole to another, and on it the earth revolves."

"Very good, Johnny," said the teacher.

"Could you hang clothes on that line?"

"Yes, sir."

"Oh, indeed; and what sort of clothes, may I ask?"

"Imaginary clothes, sir."—London Daily News.

Natural

It was only natural that in the Beecher family the name of Mrs. Harriet Beecher Stowe was often quoted to the younger generation as one having authority.

On one occasion a grandniece of Mrs. Stowe became very angry at one of her little playmates, and, stamping her foot, said: "I hate you and I don't want anything more to do with you, nor your manservant, nor your maidservant, nor your ox, nor your ass."

Her mother, hearing the outburst, sternly reproved her offspring, asking her if she knew what she was saying.

Little Miss Beecher promptly replied: "Yes; the Ten Commandments."

"Well, do you know who wrote them?"

The child, looking much disgusted, answered: "Goodness, yes! Aunt Harriet did, I s'pose."—Boston Herald.

One day a little boy came to school with very dirty hands and the teacher said to him:

"Jamie, I wish you would not come to school with your hands soiled that way. What would you say if I came to school with soiled hands?"

"I wouldn't say anything," was the prompt reply. "I'd be too polite."—New York World.

"Can any little boy," asked the new teacher, "tell me the difference between a lake and an ocean?"

"I can," replied Edward, whose wisdom had been learned from experience. "Lakes are much pleasanter to swallow when you fall in."—Youth's Companion.



LUCKY JIM COMES INTO A FORTUNE

The Sketch

Little Girl (overtaking tramp)—"Please, have you dropped this little white silk purse with nearly five pounds in it?"

Lucky Jim—"Well, Miss, it don't look like my purse, but I think, some'ow, it's my money that's in it."

(And she said afterward, "Wasn't it lucky to find the owner so quickly?")



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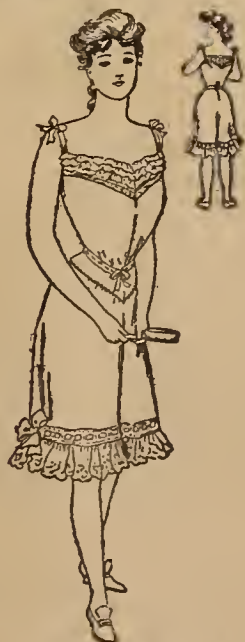


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**Some Homely Farm Thoughts**

"Do you suppose there is any class of men on the face of the earth that works harder than the farmer? More hours in the day, and use up more life and muscle, I mean?"

The man that said this was a man who knows what work is himself. He served as a sailor in the War of 1861. Since then he has been a mason. He told me that often after he had worked all day at his trade he had kept on working in his shop till a good while past midnight, making ornaments of cement and plaster of paris for buildings, earning in that way thirty or forty dollars in a single night.



We had been speaking about a certain farmer who had broken down in health and given up his place. He told me he had done the same thing by overdoing in his own profession, and then followed by the question above. It was a matter about which I have thought a great deal. I believe it is a fact that we as farmers do work hard and long, many of us, and we suffer the consequences. It does not help matters to say that men in other kinds of business do the same. There is a temptation at some seasons of the year to extend the day's work well on into the evening; but on my own farm it has been the rule to have everything done up and out of the way by sundown. Now and then there may be a little loss in the line of crops. A few haycocks may be left out in the rain or the grain be damaged a bit. But what is this by the side of a broken-down body?

And then there is the question of working on the Sabbath Day. Not far from our farm there is a man who often does this. If he happens to have hay or grain down, fit to go in when Sunday comes, he usually keeps the teams and the hands going, if they will, till it is out of the way. What do you think of that? Is it right or not? For myself, I never would do it. In haying-time no hay of account is cut on Saturday. We make it our business to clear up the fields on that day ready for Sunday. If we are making maple sugar we gather the sap all in the last thing Saturday afternoon, and trust things to go all right till Monday morning. If a few buckets of sap run over in the meantime, all right! let it run. The loss is nothing by the side of the strength we gain by resting that one day.

I have noticed that as a general thing the men who work the whole week through are the ones that are always just a little behind those who put up the tools of their labor on the seventh day. Behind in health, behind in money, behind in the influence they exercise upon the community as citizens. What they gain in the way of a few tons more or less of hay or a load or two of grain is far more than offset by the deterioration they themselves suffer, morally and physically and financially. Is it worth while? I do not believe it is.

Sometimes those who write on these topics say that there is a large percentage of insanity among the farmers of this country, and they are apt to attribute it to overwork and the loneliness of the farm. I have no means of getting at the facts of the case. But so far as my observation goes there is very little insanity among farmers. In the past seventeen years, during which we have been on the farm, I do not know of more than one farmer who has become insane, and in that case the fact of being a farmer had nothing whatever to do with it. In most cases of insanity, when we come to trace the subject of causes to their source, it is found that something in the life, and not in the occupation, is the root. Some trouble or some evil habit. How often a bad son or daughter will bring on the deepest trouble, leading to loss of mind! The same way with the use of liquor. Sin is a far more prolific source of insanity than farm-work.

And as for the point of loneliness on the farm, if that ever had any weight the time has long since gone by. So far as I am concerned, the quiet of the farm is an awfully good loneliness. The peace, the rest from hurry and the exacting demands of office business, and the thousand and one calls of society are in some measure missing from the farm, but I do not believe there ever was a single person in all the world that ever lost his reason through lack of those things.

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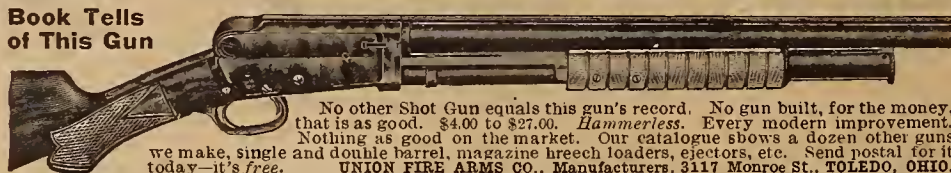
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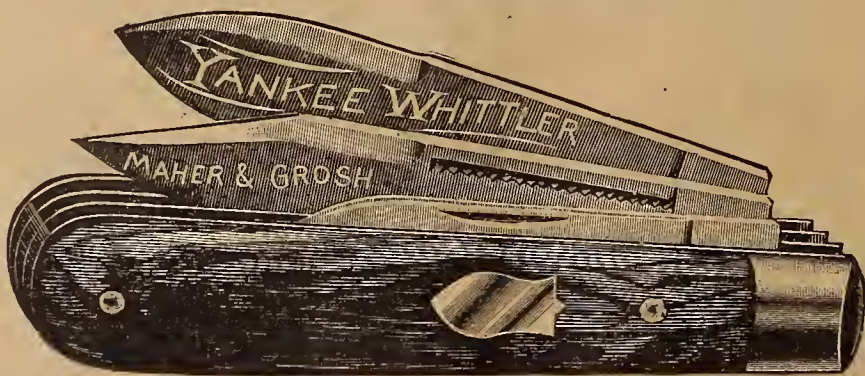
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## Farming in the Canadian Northwest

By W. R. Gilbert

**I**N THIS article I am treating agriculture in the real Northwest, not of Manitoba, whose crops of No. 1 Hard are known all over the world, but the new province of Alberta, which is at present in a chrysalis state in regard to farming, only just emerging from a ranching condition. This has been brought about by the gradual increase in population, and the steady inroad made by barbed wire, making it imperative on the ranchers to grow crops for winter feed.

This year's harvest has dispelled any fears there may have been in the minds of some as to Alberta being a farming country. Hitherto "Sunny Alberta" has been regarded as enjoying a monopoly in grazing lands, but has never been seriously considered as a grain producer, but last year saw the building of eighteen elevators, each of 25,000 bushels capacity, in a comparatively small district.

It is only a very short time since one could travel from Medicine Hat to Cal-

But to get back to the soil, Alberta is bound to become famous on account of the suitability of the soil for fall wheat raising. It has the largest wheat area in the world, and what is more, the experimental stage has been passed. There is no winter-killing, though over a great portion of the country the snowfall is light. One great advantage is that the ground does not heave, as it does in the Province of Ontario, where the farmer is familiar with this untoward condition. There frosts lock the ground, thaws tear it open, heave it, and literally throw the wheat out, killing the tender germinating plant life most effectually. Now right away from the southern boundary to Fort Saskatchewan, in the far north, where splen-

cheap fodder, which is by cultivation being greatly improved, make it a paradise for stock raising. Little wonder that at every point of any importance a creamery is found flourishing. The creamery has proved itself the best thing the government has ever undertaken for the farmer. That is, in finding markets and providing expert help, etc.

The creamery policy has been singularly successful, at least it must be, for one never hears a grumble, and as a rule farmers are not backward in giving vent to their feelings when things are not quite what they consider they should be. The issuing of creamery checks once a month provides a constant flow of ready money, and makes the cash system pos-

those who claim the moon has a potent influence to make or mar the harvest. These "moon worshippers," as they might be called, tell us that crops which mature in the ground, like potatoes, beets, turnips, etc., should be planted in the "old" of the moon, while the crops that mature in the air, like beans, peas, etc., should be planted when the moon is "new," otherwise there will be foliage in abundance, and little "fruit" to reward us for our toil.

These people as a rule think more of the moon's influence than they do of the condition or preparation of the soil. Where the moon fails to work the expected miracle they lay the failure to some other source, when, if the truth were known, the soil and weather conditions were not favorable at planting time.

Put faith in the moon if you want to. A little harmless superstition will not injure you to any great extent, but put



OATS-FIELD IN ALBERTA PROVINCE, CANADA—YIELD EIGHTY-ONE BUSHELS TO THE ACRE

gary and see great bunches of steers, with daring cowboys here and there, in a free and untrammelled fashion, riding where-soe'er they listed; an occasional dwelling, a cattle corral near the track, for convenience in shipping, and nothing more. This has all been changed. The forward movement in immigration, having for its object the filling up and settling of this vast prairie, and this has been done wisely and well by the present Dominion government, which set itself seriously to the task of securing the one thing needful—the population. Where we had the open prairie before we now have villages and towns, with banks and stores, churches and schools, all requiring and presenting new fields for business activity.

The opening up of this splendid country has greatly helped the eastern provinces, for in order to meet the demands of such a splendid market, to supply the needs of the gigantic army of newcomers, they have been obliged to increase and enlarge their plants. Naturally there have been complaints of the great number of non-English-speaking people coming in, but after all, what does it matter to the merchant or the manufacturer who he provides for, if only the profits be increased.

did wheat has been grown, the above detriment is unknown. Besides this, fall wheat, the growing of which is in its infancy, spring wheat, barley and oats give splendid returns. This season I have personally seen forty bushels of wheat to the acre, and eighty-one bushels of oats grown within thirty miles of Medicine Hat, the town which provides Chicago with its blizzards—see the Chicago press. And in passing I may mention that there is no climate in the world superior in healthful qualities to that of Alberta.

Certainly there are cold snaps, twenty and thirty degrees below zero, once or twice in the winter, but even at that there will be found walking on the streets of the small towns more people without great-coats than with them. Natural gas only costs seventeen and one half cents per one thousand feet.

Besides the grain mentioned, clovers also grow well, and I am convinced that within two years alfalfa will be one of the best paying crops grown, as by its aid, in combination with straw, cattle may be fattened by the small ranchers for the spring trade.

Central Alberta and a little farther north is ideal for dairying; cool nights,

sible; it has lessened perceptibly the baneful necessity of requiring credit, the horrors of which are probably as great to the merchant as to the farmer, who has labored under the great disadvantage of being without ready cash. The amount of butter manufactured is increasing enormously. Large quantities are shipped to the Yukon, and Japan has now become a good customer.

I do not hesitate in saying that Alberta, with its varied resources of coal, natural gas and petroleum, combined with its great agricultural possibilities, will in the near future become the banner province of the Dominion of Canada.

### Planting Crops in the Moon

There still lingers a good deal of old-fashioned prejudice in regard to planting certain crops in the "old" or "new" of the moon, and some farmers pin all their faith to the theory that the "Queen of Night" is a potent influence governing the planting of potatoes, beans, peas, etc.

The belief in the moon's influence is not confined to the ignorant and superstitious either, for people of education and intelligence are often found among

more faith in a thorough preparation of the seed-bed, no matter what crop is to be planted. Then, when the weather is favorable, plant your seed, and after it is planted be sure it has thorough cultivation, both in the "old," "new" and "full" moon, and you may confidently look forward to a full harvest at the proper season.

When it comes to making a crop profitable, just put nine tenths of your faith in good soil, thorough preparation and excellent cultivation.

The moon is all right in its way, and we would not like to dispense with it. If you are a young farmer out riding of an evening with your best girl, and she is not cross-eyed, with a wart on her nose, but fair to look upon, then, not the "old" or the "new," but the "full" moon is at a premium. Without a doubt it exercises a good deal of influence on the annual crop of benedicts and matrons. When it comes to purely agricultural products do not leave too much for the moon to accomplish, but get a hustle on you and help the sun to exert all its influence by stirring the earth at frequent intervals.

Michigan.

APOLLOS LONG.



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## An Insurance Election Campaign

UNDER the New York insurance reform law there will be an election December next of directors of the Mutual Life and New York Life insurance companies, and a great campaign is now on.

The International Policy-holders' Committee, a protective organization formed to oust the speculative and speculative financiers who have long been in control of these companies, will make a mighty endeavor to elect directors who will be faithful to their trust, manage affairs in the interest of the policy-holders, and end the thieving that has been going on for years past. It has issued an address to the policy-holders of the two companies, numbering over 1,250,000, urging them to defeat the administration tickets nominated by the "old crowd" of managers.

There will be a battle royal over this election. The high financiers who have been making free use of the policy-holders' money will make a tremendous struggle to retain control of these insurance companies with their many hundred millions of assets and income. Not until control is wrested from them can the companies be thoroughly reformed.

## Why Do Railroads Give Rebates?

Within the past month there have been some important decisions by the courts in railroad-rebate cases. The Burlington Railroad and the Armour, Cudahy, Swift and Morris packing companies were fined \$15,000 each, and two freight brokers were fined and sentenced to the penitentiary. In another case the Chicago and Alton Railroad was fined \$40,000, and two officials \$10,000 each.

Why do not the railroad companies comply willingly with the spirit of the rate law? Of what advantage is it to any railroad company for its officials to give to one corporation a secret rate

on oil of twenty cents a barrel, an open rate of thirty-five cents to its rivals, and then turn the fifteen cents difference over to the one greedy corporation?

It is evident that when such illegal acts of discrimination and rake-off are committed the actual control and operation of the railroad are not in the hands of its real owners, but in the hands of some group of financial buccaners who are running a system of double robbery of the people—robbery in transportation charges and robbery in monopoly prices for the products transported.

## Investigation of the Grain Trust

The Interstate Commerce Commission has commenced an investigation that ought to strike pay dirt in nearly every locality in the country that ships farm products to market. The La Follette resolution, adopted by the Senate, directs the commission to investigate "the elevator and grain-buying and forwarding business of this country, to determine to what extent special favors have been granted to them by the railroad companies, the influence which the alleged monopolizing of this branch of the business has had upon the market, the injury it has worked to the grain producers, the extent to which the railroads, their officers, directors, stockholders and employees own or control the grain-buying and grain-forwarding companies, and the manner in which these railroads, their officers, directors, stockholders and employees secured their holdings, if any, in these grain-buying, storing and forwarding companies."

A little study of market reports and comparison of the prices received by grain growers at different shipping points is enough to convince any intelligent man that there is in operation a vast scheme of unjust discrimination in freight rates and prices of grain that takes hundreds of millions of dollars annually from the farmers of this country. In Nebraska alone it is estimated that the farmers lose \$20,000,000 annually on account of the collusion between the railroads and the elevator combines.

There is practically no competition in the buying, storing, forwarding and selling of grain. The Senate resolution directing this investigation is based on known facts. The things alleged exist. Grain producers are absolutely at the mercy of elevator combines and railroads working in collusion, and are the victims of their conspiracies.

Enforcement of the rate, anti-trust and conspiracy laws will work a revolution in the grain business, and be of immense benefit to the grain growers. In fact, nothing could now add more to the general prosperity of the whole country than the rigid enforcement of all just laws.

## The Parcels-Post

"O wad some power the giftie gie us  
To see oursel's as ithers see us!  
It wad frae monie a blunder free us,  
And foolish notion:  
What airs in dress and gait wad lea'e us,  
And ev'n devotion!"

Nowadays, the press is the power that makes us see ourselves as others see us. Sometimes it really shows "monie a blunder and foolish notion" of our own; sometimes it shows what narrow, selfish notions "ithers" have of us, and sometimes it reveals their plans against us.

Oftentimes it is an advantage to know what others think of us, particularly if we have to do business with them. The knowledge may put us on guard, and impel us to act intelligently in self-defense.

At a recent convention of retail country merchants one of the speakers, arguing against the parcels-post, gave his notions as follows:

I contend that the parcels-post, if successful in its purpose, which is avowedly that of furnishing the rural population with cheaper merchandise, would have a tendency to keep the rural population on their farms. You know, and everybody knows who has thought seriously of the proposition, that the farmer who comes to town once a month is a very, very poor consumer. The oftener he goes to town, the better consumer he

becomes. In fact, my theory of prosperity is to stimulate the desire on the part of the consumer, that the consumer may be induced to his greatest effort. For instance:

One farmer is content with the simplest, plainest fare. He works and slaves in his way. He possibly accumulates real estate or wealth, yet he is a positive drag to the whole community. His neighbor works less, goes more, wants more, spends more and gets more to spend.

My contention is that the retailer today is the present edition of the trader of fifty or one hundred years ago. As the trader explored the new countries he met the inhabitants, found them living on the hand-to-mouth policy with no thought of the future, with no care for their personal appearance, with no ambition. By the aid of a string of beads he induced the natives to go out and kill more venison that they might procure the pelt. After a year or two of such trading the natives took to hunting as an avocation, simply because they learned to want the beads and guns and products of modern civilization as taught to them by the trader. In other words the trader is the forerunner of civilization, and I might say of Christianity.

To teach the consumer to desire more merchandise and better merchandise is the retailer's only justification. If he were, as accused, simply a middleman taking a rake-off from everything the consumer uses, he would long ago have gone out of business. But by keeping the merchandise before the people of the neighborhood, showing this merchandise, talking this merchandise, he teaches them to want more and more of this merchandise. His justification, then, is that he is necessary to create a desire for more and better merchandise.

To make a man want more means to make him hustle to get the wherewithal to satisfy the want.

Now this gives the farmer a chance to see himself as some merchants see him, a being to be "educated" to more wants and made to hustle after the wherewithal to satisfy them, a being to be exploited for his own salvation, and incidentally for the profits of the traders.

Maybe the farmer can now see that retail merchants oppose the parcels-post, not to prevent him from getting cheaper and better merchandise, not to prevent the breaking up of local combinations and price-conspiracies that, both in buying and selling, take extra profits out of pocket, but to keep him from relapsing into savagery where he would be "crawling out of a cave in the morning, club in hand, hunting a lizard for breakfast."

Is it one of the possibilities that the farmer, having this view of himself in mind, will join the country merchants in opposing the parcels-post at the next session of Congress? Hardly. Farmers want the parcels-post, and know why they want it. With a better knowledge of the opposition they will redouble their efforts and demands for it. They will remember that the same kind of false arguments were made against rural mail delivery, but rural mail delivery has brought the farmers in closer touch with the world and is of great benefit to them. The parcels-post will be of immense benefit to them when they get it.

J. B. Barnett.

\* \* \*

## The Secret of Boys Leaving the Farm

"MONEY is not the only thing. It counts very little by the side of real happiness."

I wish I could manage to help those who read this article to catch the earnestness of the man that said this. He was an old man, far past the three-score-and-ten mark. His life had all been spent on a farm. From the point where we stood we could look out over the farm he had hewed out of the woods, with its nicely kept acres, its comfortable barns and its good crops now ripening toward the harvest.

I had said something like this: "I don't see what we farmers are going to do for help. Everybody seems to be leaving the country and going away to town."

Just at that moment my mind had been directed into this channel by the fact that a young man in whom I had been greatly interested, one who had seemed to have a decided inclination to stay on the farm, had decided to leave

it all and go to the city where he thought he had a chance to make more money.

"You know yourself," he had said in answer to my protest that he might be making a mistake, "you know that there is no chance to make money here, compared to what there is in other things. Farming never made a man rich, as we talk about riches."

And I had been telling the old man this, with the result that he made the statement with which this story opens.

"Money is of little consequence, in and of itself. It never made a man happy. It takes a heart to enjoy the things money will get and what it will do to bring happiness. I have been the whole length of that road, and I have not had my eyes shut as I have been traveling this way. I have seen the time when it seemed to me I might make a little more money and make it faster by leaving the farm, but I have stuck right here, and now I am not sorry I did."

"But why is it, do you think, that the young men of our times all seem to be bound to go?"

"We are all crazy after money!"

Crazy after money! What a world of truth in those words! What a rebuke, too, for the spirit of the age! As if money had the power to make a man better, wiser or happier. My old farmer friend is right, absolutely right. In and of itself, money is the poorest thing in all the world. And yet the whole world has gone mad after it. It is this which is stripping our farms of the brightest and best young men. It is this, too, that is making us all uneasy, discontented with our position in life, and ready to drop everything and rush off into some other kind of business in order that we may get a little more money.

Where does the blame for this lie?

Partly in the fact that for a long time it is the man that has made a fortune who is exalted to the skies. Whose are the names that are strung together in great lists and published for all the world to see? Who but the men that have made their millions? When the "leading citizens" of a town are called in to make an address before the youth of our public schools what is the burden of the thought expressed? What if not to win great fame and fortune? The boys are told how other men have made their pile. Their hearts are fired to get rich, too. They go out to dicker and trade and traffic and perhaps cheat their fellows at some little bargain, and we wink at it and call them smart, never stopping to think that by so doing we are spurring them on to do more disreputable things by and by for the sake of winning a fortune.

The men high up in life are not the only ones that are worthy of the name of grafters. We need to ask ourselves if we are not inclined to the grafting habit ourselves. Do we need to be hired to go to the caucuses? Has it come to a time when we like to hold a petty office? Do we value our "influence" pretty highly when the candidate comes round in the fall of the year looking for support in the nominating convention?

It is time for the farmers of this country to stop a moment and ask whether or not they are driving the young men away from the farms by this very mistaken policy as to what really makes a man a man. The farms of this country will surely bring the one that does his work well, peace, comfort, and a place in life that are worth more than the possession of wealth without the spirit to enjoy. Money may not come as fast on the farm as it does in some other lines of business. But it comes, and it brings more of real enjoyment to a man that has a heart right with the world and with his Maker than can possibly belong to one that sinks everything in the chase for money.

So let me set down once more the wise words of the old man:

"Money is not the only thing. It counts very little by the side of real happiness."

Edgar P. Cuneent.



**Salient Farm Notes**

**Poison in Tin Cans**

A FEW mornings ago one of my neighbors found a big flock of his brooder-raised chicks cold and stiff in death. On inquiry he learned that the good woman next door to him had emptied a can of salmon which after being opened and partially used had been kept in the house for some time, and, of course, had then begun to decay. The flock of chicks had found this salmon and greedily devoured it. For this indiscretion they paid with their lives. This incident reminds us once more of the dangers lurking in tin cans, and that spoiled meat and fish is unfit even to feed animals. Better bury or burn it.

**Schools Versus Insects**

The city of Buffalo has for some years greatly suffered from an invasion of the tussock-moth. The caterpillars of this insect feed not only on the foliage of all sorts of fruit trees but also on that of all sorts of shade trees, and I have at times, in June, seen many of the street trees in the city entirely denuded of foliage, showing the effects of this greedy cater's operations.

The city has found a way out of the difficulty by enlisting the cooperation of the schools and the school-children. This may be a suggestion of value to other communities similarly afflicted.

Where the tussock-moth is at all abundant, you will find during late fall, winter and early spring many little bunches or clusters consisting of a dead leaf on dead leaves, fastened or glued to the branches, each bunch containing a mass of from three hundred to five hundred eggs attached to an empty gray cocoon, from which the moth which deposited the eggs had emerged. Damage by and the spread of this insect is most easily prevented by collecting and destroying the eggs during the winter months. This task was assigned to the school-children, and the stimulus of competition among them produced wonderful results. The children of many of the over sixty schools of the city gathered and destroyed many thousands of egg clusters. John Sullivan, a pupil of school No. 35, came ahead in the race with 17,183 egg clusters to his credit. All this was mere fun for the children, but it was the salvation of most of the street trees in the city.

**Spraying Potato Fields for Beetles**

A Sharpsburg, Ky., reader asks for instructions how to destroy the potato "bugs." It seems that much has already been said on this subject, yet there are always points that are not fully understood. Our methods and practices are also changing as we procure new information and new means to work with.

The first step considered necessary years ago was to pick off the old hardshell beetles by hand as soon as they made their first appearance on the still small vines. This was to prevent not only their eating foliage when there was only a little of it, but also the deposition of their eggs, and was a good way of fighting the pest, for which prompt action is always a prime requisite.

Now, however, when spraying with Bordeaux mixture has become a general practice among progressive potato growers, and while we have in arsenate of lead a thoroughly dependable poison which can be put on in such strength that the beetle that takes a bite out of the treated foliage will hardly have time to eat a great deal of it, or to deposit its eggs on the leaf, we find a much more expeditious, more effective and generally more satisfactory way to spray the potatoes very soon after they first come up with the combination mixture than to resort to the old and unpleasant plan of hand picking.

I would prefer to do this first spraying, even on a number of acres, with a good knapsack sprayer. The plants are then small, and it takes but a little dash and a very small quantity of the mixture for each plant. With a knapsack we do not have to cover the entire surface of the field, and an acre is soon gone over.

Ordinarily I consider the knapsack a garden implement, and really an indispensable one; in this one respect, however, it seems to me to be a really useful field and farm tool. For the later sprayings in fields of five or more acres, an implement of greater working capacity is needed. At least, I would not like to have to carry the knapsack on my back to thoroughly spray several acres of potatoes in rank growth.

It is work for one of greater strength and endurance than I possess. I know many farm laborers, however, who would do it as willingly and with no more inconvenience than other ordinary farm-work.

I am sure that the farmer who grows five or more acres of potatoes with success can well afford to either buy or rig up a one-horse sprayer in the shape of a tank or barrel on two wheels, and some of the larger growers will want even a power sprayer, as the pumping is more than work for a child. Present indications point to a very serious infestation of the late blight (so-called) this year, and the grower who will spray his vines frequently (say at least three times during the season) and thoroughly, will find himself well repaid for his foresight, and for any and all expenses connected with the work.

**The Dog Nuisance**

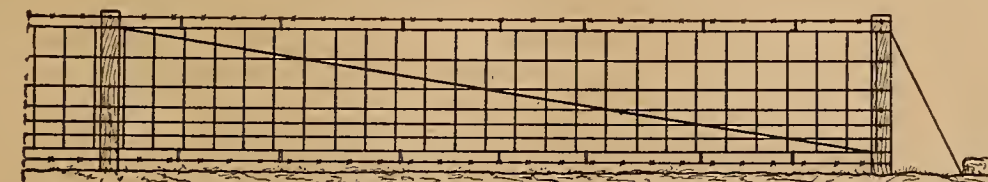
Fear of offending a neighbor often makes us put up, grudgingly and growlingly perhaps, with many little annoyances which really we should not be asked or expected to endure. The keeping of useless, worthless curs is one of the most prolific causes of such petty annoyances, if not at times of actual dangers, or of considerable loss. Dogs worry and often kill sheep at night, and poultry in daytime. At various times I have found spots, here and there in my garden, torn up, and plants uprooted, spoiling the neat appearance of a well-kept garden, by large dogs coming together from all over the neighborhood and having a frolic. The smaller annoyances we stand without much complaining. It would be unreasonable to expect a sheep or poultry owner to say nothing when he finds his sheep or hens killed.

What are the farmers to do with this curse? asks "American Agriculturist." Why rise in their might and get legislation that will do justice both to the owners of sheep and dogs. Failing in this, let the farmer put every dog out of the way found prowling on his place not accompanied by someone who has him in charge. Dogs which prowl about a neighbor's sheep pasture are worth more to the country dead than alive.

In fact, I have not seen the dog that comes on my place from any of the neighbors which would not be worth a good deal more for fertilizer than he is alive, either to his owner or to the country.

**Killing a Large Tree**

A reader desires to remove an apple tree sixteen inches in diameter from the lawn without cutting it down. She asks whether there is not some acid or other substance she could put around the trunk that would in time kill it, and how long it would probably be before it would die. This is to me a new propo-



WIRE HOG FENCE

sition. Possibly some reader might be able to suggest a way out of the difficulty. Girdling the tree, by cutting around the tree and removing the bark and cambium layer, in a band eight or ten inches wide, might do it. The application of sulphuric acid, if freely enough, would undoubtedly also accomplish it. I can see no reason, however, for resorting to this round-about way when the direct method of cutting the tree down, would surely give the desired results.

*T. Greiner*

**About Rural Affairs**

**Farm Fencing**

SEVERAL people have asked me a number of questions about pasture fences for pigs. Some of them state that they can obtain posts at a reasonable price, but lumber costs too much to permit of its use, while the quality of much of the netting or woven-wire fencing is very bad, the galvanizing, especially, being so thin that it is off and the wire rusted through in a short time.

It seems to me that most people could find satisfactory answers to such questions as these very near home if they would keep their eyes open and look about. Whenever I drive about the country I take special notice of all improved methods in agriculture, of buildings, fences, drainage, tree planting, etc. I especially note the different methods of fencing cattle and hog pastures; the different kinds of fencing used and how it seems to be withstanding the elements and the rubbing and pushing of the stock.

I have seen some of the much-advertised brands of woven fencing bent, broken and crushed and rendered utterly worthless through not being properly erected, and some that looked very pretty when first put up, red with rust and in a condition that showed plainly that it was built for show rather than use. Then I have seen woven-wire fences that were put up to stay, and were staying. All these things can be seen in almost any locality.

**WIRE HOG FENCE**

I have seen several hog fences that were effective and lasting, while they were also comparatively cheap. One of the best I have ever seen was around a fine field of clover in which were about fifty as fine and thrifty pigs as I ever saw. The posts were sixteen feet apart and were three feet high. About two inches above the ground was a barbed wire, then a strip of wire netting thirty inches wide, and at the top of the posts another barbed wire. The barbs on this upper wire were very short. Half-way between the posts the edges of the netting was tied to the barbed wires with bits of bailing wire. Both barbed wires and netting were drawn tight. At each corner smooth wires were fastened to the foot of the corner posts and to the top of the second posts, and there was a strong wire stay from the top of the corner posts to a rock set three feet deep in the ground three feet outside the corners. There were also smooth wire braces every ten rods. These extended from the foot of an extra-heavy post to the tops of the posts on each side of it. This fence has been up three years, and is as firm and effective as the day after it was built. The owner declared that he felt satisfied it would last twenty years.

**OSAGE ORANGE**

Where Osage Orange does well I have seen some perfect hog fences made by stringing barbed wires along the hedges. When the hedge was two years old it was cut down to six inches of the ground. Where plants were missing it was laid down on the ground. Cottonwood, soft maple and other soft-wood stakes were driven in the middle of the hedge row about fifteen feet apart. These stood about three feet high, and to them barbed wires were stapled, the first as low as possible, the next four inches above it, the next six, the next eight above that, the next eight

plained this plan to a farmer who had a badly grown and gappy hedge which he was about to cut out and replace with an expensive fence, and he adopted it at once. The result is he has as good a fence as can be found. I know of no shrub or tree equal to Osage Orange and arbor-vitae for making a combination fence like this, but if I lived where Osage does not do well I would try other shrubby trees on a limited scale. For cross-field fences one must use posts and wire, and the strongly woven fences topped with barbed wire are the best. It must be kept in mind that all the wires and stays must be near enough together to absolutely prevent stock of all kinds from getting their heads through either low or high. If an animal can once get its head through a woven fence that fence will very soon be ruined. A strongly stapled barbed wire at the top is the only thing that will prevent some cows and horses from breaking a woven-wire fence down. And it should be stapled near enough the upper edge of the woven fence to prevent animals from getting their heads between. Then it is a good idea to not have any tall growing crop near enough the fence to tempt animals to reach over or break through.

One farmer I know had a well-built six-wire barbed fence between his farm and that of a neighbor which was not satisfactory because of the number of animals injured by it. I suggested that he plant an Osage hedge along it, setting the plants with a spade close to the wire and about eighteen inches apart. He did so, and after the second year never had another animal injured by the barbs. He says it is a little difficult to trim at the top owing to the top wire being too high—five feet—but it is a prime stock fence all right. Another farmer put a strongly woven wire fence, three feet high, over the old hedge, which was next to worthless and had been cut off close to the ground, and that has made a good fence for hogs, and he has since strung two barbed wires above it, which makes it good for all kinds of stock. The best thing about these combination hedge-and-wire fences is that they are good for many years; the only repairs needed being the regular trimming.

**ARBOR-VITAE AND BARBED-WIRE FENCE**

Three years ago a farmer living in Wisconsin wrote me that he had only a half mile of barbed-wire fence on his place, but that had cost him about two hundred dollars worth of live stock, chiefly in bad blemishes on colts that had run against it in play or when chased by a dog. I told him that he was right where arbor-vitae flourished, and that he should get young trees two feet or so high and set them three feet apart alternately on either side of his barbed fence and right against it. He did so that spring, and he says it is going to be a great success. The trees have reached the top of the fence, and during the past year not an animal has been injured by running against the fence. If he keeps it trimmed down even with the top of the fence and in at the sides he will have an ideal fence. Or, if he lets it grow at will it will make both a fence and windbreak.

**PERMANENT FENCES BEST**

I am well satisfied that permanent fences are much the cheapest in the end, and that wire, either barbed or woven, and some sort of hedge shrub make the best fence one can erect. Hedges that are properly cared for take up but little ground, and if reinforced with wires are proof against the assaults of any kind of animal. For small yards, where the stock is in contact with the fence almost constantly, I know of nothing better than good woven wire, reinforced with about three boards fastened to good posts not over eight feet apart. A barbed wire at the top prevents stock from reaching over and breaking it down. But I would have the barbs very short and near together.

*Fred Grundy*

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## When the Bank Failed

SURPLUS EXHAUSTED—CLOSED DOORS  
—FAILURE

HERE were tears in the eyes of both the farmer and his wife that morning, and no wonder. The account of the master had been overdrawn, deposits had ceased to come in and failure appeared to be imminent. Reason enough for mourning and lamentation. How did it all come about?

Fifteen years before that day the farmer and his wife, with high hopes and strong purpose, had come on the place. They had saved money enough to pay for the farm and stock it well and still have enough to make some improvements on the farm buildings and on the farm itself. They had two boys, both stout and healthy lads, one of whom was now able to do many little chores about the house and barn.

Things went well for some time. The farmer whistled and sang about his work. At that time being about forty years of age, he often remarked that he was able to do more work than at any previous time in his life; and he did work hard, too. Everything about the place felt the touch of his hand, and he was proud to hear the neighbors say, "That man is a hustler. Quite different from any man that ever lived there before."

The buildings were greatly improved, new ones came to take the place of old ones and the fences, fields and crops all gave evidence of a master mind and a strong hand at the helm.

Then that farmer became ambitious to do still more. That, in and of itself, was all well enough. The man whose heart is not fired by ambition is not apt ever to rise very high in the scale of humanity. But this farmer did what so many other farmers have done, he lighted the candle of life at both ends and fanned the blaze of each till they glowed brilliantly. The light looked pretty. For a time it charmed the farmer, and also his neighbors.

He was an intelligent man and this brought him into demand as a public officer. The people of his township laid demands upon him and he responded, being a patriotic and loyal citizen. But this added burden made claims upon time and strength that could hardly be afforded. In order to meet these demands, the farmer was compelled to get up a little earlier in the morning. He often left his bed at two or three o'clock in the morning and worked till late at night. He felt that he must do this in order to keep the farm-work going and at the same time carry out his promise upon accepting the office to which he had been elected.

Now things began to pull a little harder on the farmer. He had done what thousands of men are doing all over the world to-day, he had taken upon himself too great a load. And he was not strong enough to stand up under the burden. He began to stagger.

"You are working too hard," the wife now said. "Let's drop some of this load. You have a duty to yourself, first of all, husband."

The neighbors remarked that they did not hear the farmer's whistle as he went about his work, as they used to do.

"Better hold on a little," they, too, began to caution. "A man can't stand everything. You'll break down, first you know."

The farmer laughed a little.

"I must do the business that comes to me the best I can. It is what I have promised to do, and I never shirked a responsibility yet." But to his wife, who knew what no one else did, not even the farmer himself, he said:

"We'll go slower after a bit now. I want to get enough ahead so that we will not feel cramped when we get old and can't work."

There were times when he worried a trifle, for fear that he might not keep up long enough for that; still he staggered on. But one day he stopped all upon a sudden. It was after a hard day's work on the farm. Just what the cause was no one ever knew. The doctors said it might be one thing and it might be another. At any rate, there was a long time of sitting still and seeing someone else work ahead. The farmer fought against the prospect, but nature had issued a warrant for his arrest, and no man ever long succeeded in evading such a summons.

For months the farmer lay on his back. There was plenty of time now to count up the savings of the years and still have many weary hours left in which to count the figures in the paper on the wall of his room. It was not very satisfactory business. What did the dollars amount to when there was no way of enjoying them? But the worst of it was that there was no immediate prospect for anything better. The health account at the bank had been overdrawn. Deposits were not likely to be made for a long time. The doctor shook his head when the farmer talked about getting out to look after things next week. Next week came and still nothing in sight but further waiting.

## Farmers' Correspondence Club

What about this thing of lying here in bed and seeing someone else doing the world's work? Not fully in accord with the feelings of an ambitious man, is it? And especially when one is all the time conscious that he has brought himself down where he is. That hurts more than anything else.

It was a hard proposition to face, but it must be met fairly and squarely. Ambition is a cheat when it leads a man to rob himself. A bulging pocketbook has little of happiness to the man who knows that it has cost the expenditure of everything else that is worth having.

So there came a time of solemn consultation, with tears and regrets, but ending in the decision to leave the farm and go somewhere to rest and get back lost strength. There came the time of packing up, all of it with a heavy heart and many an hour of looking at the trees that had been set out, the buildings that had been made so beautiful and the hundred and one things that had been accomplished to make the farm home comfortable and attractive. Then the going away from it all for no one knows how long.

Now this is not a fancy picture. The farmer and his wife are real persons. They know that this story is by no means exaggerated. And there are many and many all over the country that can duplicate the tale. For they have been all through it themselves.

And the question is, "Does it pay? Which is worth most, a few hundred dollars more or less in the bank, with no health to enjoy them, or health, a sound body, and enough to keep the home comfortable through storm and through sunshine?"

It does not seem as if there should be any question about this, and yet, how often the mistake made by our farmer friend is repeated! Is there not something of warning in all this for you and me, fellow-farmer? Seems to me so.

EDGAR L. VINCENT.

### A Fine Stand of Clover

Winter and spring sown clover in this vicinity is almost always a failure, owing to the drought that usually prevails in early summer.

Last August we made an experiment of sowing clover seed the latter part of August.

We had a large field, where the soil was in a poor condition, plowed and put in good condition for the seed, which was sown the last week in August.

After sowing the field was rolled; this we thought would be necessary when sowing clover seed at this season of the year.

The seed came up fine, and the young clover made a good strong growth before freezing weather set in. During the cool fall days it seemed as though you could almost see this clover grow.

This field of clover became quite a point of interest, as many farmers in this section were anxious to see what would be the result of this experiment. The young clover did not winter-kill. We harvested a full crop from this field the first week in June.

One very great secret of success with sowing clover seed in the summer is the rolling of the field after the seed is sown. Last summer, when sowing clover seed, we left one corner of the field where the soil was not rolled after sowing the seed. The seed came up very poorly in this part of the field.

It seems to be a point of considerable importance to roll the soil after the seed is sown.

Indiana. S. E. BRANDIS.

### Making Headway Against Sparrows

When English sparrows on any farm have become so numerous as to prove a pest, it is doubtless a heroic measure to get down a blunderbuss or shotgun and "shoot the daylight out of the pestiferous birds." By this method of extermination the fowler may derive considerable target practice, work off his laudable enthusiasm, kill a few birds and scare the feathered foe to his neighbor's place.

The writer has been practicing and observing a method somewhat less potent in the way of an audible demonstration, but much easier to apply and ten times as effective.

At the beginning of the season locate a few apartment boxes for the birds at places where they will be easy of access. This having been done, the boxes should be visited regularly once a week all summer and the nests and eggs destroyed

with as little demonstration as possible. By the end of the season one man will have destroyed more of the pests—in the shell—than the whole township has killed in a year by shooting.

Our record for the week ending June 25th, was fourteen nests and sixty-four eggs destroyed. The writer has observed cases in which twelve dozen eggs and young birds were taken by this method at a single hunt on an ordinary farm.

Ohio. GEO. P. WILLIAMS.

### Cause of Failures

With an experience of fifteen to twenty years lifting and transplanting shrubs, trees, etc., it may not be egotistical for me to affirm that the following notes should be of value to some of the many who buy and plant in the spring.

First it is to the interest of the nurseryman to send out such plants, trees, etc., as will make a good impression when first in line with the eye. If the nurseryman sends out hybrid rose-bushes with four to five strong green canes, each three feet in length at least, red raspberries with two feet of cane to each plant, peach trees standing six feet with seven or eight long branches, and poplar trees with bodies of seven feet and branches leading out five feet more, he is termed a "fine man," and the stock is termed excellent.

So far, so good—the nurseryman has done his part and the purchaser begins his—the roses are handled carefully; great care is taken not to break one of those four or five fine canes, the red raspberries are put in good soil, the root perhaps two or three inches deeper than well for it, but it is put in tight with the right end up, and the whole length of cane just as taken out of the package left, the peach trees—noble trees—are handled gingerly for fear one of the numerous limbs might be bruised, and in the hurry to get the trees planted never a thought is given to root pruning. The poplars are taken care of in the same way, and all left with tops and branches just as dug in the nursery. What is the result? In many instances, the rose-bushes look brave for several days, and the planter thinks that they are all right of course, he planted them, etc. A week later and the majority show no new shoots; upon examination it is seen that they are actually going back—dying. One by one they drop off, even some of those that showed new shoots are shriveled up. Must have been something wrong with them; maybe had been doctored. The raspberries had nice roots, but still they don't grow, don't leaf out—that is only here and there one, and maybe a few more shoot out at the root. In two or three weeks the nurseryman is written that so many rose-bushes and so many raspberries were no good—never started. But the peach trees began to leaf out finally. What an effort was made by the green limbs to furnish all the sap necessary to supply the many swelling buds, but what's the use, it cannot be done. Only fancy ten to fifteen feet length of limb sucking day and night on one little body whose roots have not yet had a chance to get any sustenance.

Some of the trees gave up the job early; many others lingered on and dropped out one by one, a few for some reason lived on in fairly good shape. The poplars, because of a peculiar way of their own of hanging onto life, did not die, but what a sight. They were planted as a screen to hide objectionable views, but are an objectionable sight in themselves, some being so tall they could not stand the rough west winds and leaned east; others didn't like the east storm and leaned west; some had foliage at the extreme tip of the tallest limb while others showed foliage on the lowest limbs and none on the highest. The effect was disappointing to the planter.

Now if the planter had reduced the number of rose canes to three and had reduced the length of these to two to four inches each, had cut the raspberry canes close to the earth as soon as planted, had trimmed the peach trees up to whips and headed them at four feet, not forgetting to go carefully over the roots with a sharp knife, cutting off all bruised parts, shortening the long ones and cutting out the fluffy roots, and had shortened the limb growth of the poplars one half or more, success would have been his. It is a hard thing for us to reduce a fine-looking plant or tree to planting shape I know. We are not

afraid but do not like to—seems too bad. I once set out several hundred Crimson Rambler roses, imported bushes, immense in size and good in every way, and was tempted to leave several canes twelve to fifteen inches long—two weeks or more later saw them all cut close to the ground, and eventually I had a good-looking row of roses, but it was an entirely new growth of wood—the cutting back saved seventy-five per cent of them. Many failures with blackberries have resulted from the same trouble as with raspberries and strawberries, because the foliage was left to drain the root-life before it had a chance to secure any help in its new home.

New York. E. H. BURSON.

### We Protect the Birds

Not a nest is destroyed if it can be saved. See that stake out in the meadow? Near it will be found a bobolink's nest, the man with the mowing machine will cut around it. Within two feet of the wheel track and about ten paces ahead of us is seen another little stake, and close by, if one peers a little, will be seen a cozy home and four little tenants. The man with the cultivator sees that stake and Jerry is halted before he can plant his iron-shod hoof upon this home of the farmer's friends. There is a pile of brush that perhaps looks unsightly, and we decided to burn it, but when about to apply the match a pair of song sparrows made a great fuss, and upon investigation found there was cause for it—it is needless for me to say that the brush-pile is still there. Peep into the old shanty there, and on top of a post close up against the roof boards you will note part of a lath nailed, and behind this a robin's nest. Three times last summer these old friends of ours built there before the lath was tacked on, and as many times down came the nest. Discouraged they did not attempt it again that season, but this season they are back, and the nest is safe—see those four beaks?

New York. E. H. BURSON.

### Prepared for the Farmer Who Don't Read

The market is full of preparations intended to be put off on the man who does not read, and who neglects to post himself on his own business.

If we take up a list of prepared commercial fertilizers we find a goodly number of brands that are evidently intended to deceive the purchaser. There are special preparations for certain crops that sell at a high price, of which a careful analysis and consideration will show that they are not as well prepared for the crops for which they are recommended as goods which cost less.

Then there are the "dissolved bone," "pure animal bone" and many others that are intended to appeal to prejudice rather than reason. They may be all right when properly used, but the farmer should be better posted and be led by reason rather than allow the dealer to appeal to his prejudice.

I remember an agent who represented a fertilizer company that made a great point of the name of their goods, "Natural Plant Food;" result, a lot of worthless stuff which contained no plant food was palmed off on farmers just because of its name.

Then the "red-albumen" fellow succeeded in defrauding a number of poultrymen with his fake goods, just because his victims did not read reliable literature.

The man who does not read up on his business is blind to his own interest, and is an easy victim to the sharper who wants to get money without giving anything of value in return.

Is it not time that farmers are awakening to their own interest and reading more agricultural literature and fewer trashy periodicals?

West Virginia. A. J. LEGG.

### A Fine Yield of Clover Seed

Two seasons ago we thought we would not cut clover for seed, as the drought had been unusually severe during the greater part of the summer. We expected that the protracted drought would lessen the turnout of seed.

Several farmers in this vicinity said that they did not intend to cut their clover for seed. They thought it would not pay for the labor and expense of thrashing.

I had a very large field of seed-clover, and, as I was needing the seed, concluded that I would cut it and see what the results would be. The turnout of seed was excellent. It appeared as though the drought was of some benefit.

I can see now that a dry season after the seed has formed will increase the yield of seed in place of lessening it.

Indiana. S. E. BRANDIS.



## Theory and Practice of Crop Improvement

IN THE "Iowa Homestead," Prof. C. P. Bull, of the Minnesota Experiment Station, makes the following sound suggestions about improving crops:

The average state yields of our field crops as a whole are abnormally and shamefully low, when we know that under good systems of farming it is possible to get sixty to one hundred bushels of corn per acre; twenty to thirty of wheat; forty to fifty of barley; sixty to eighty of oats; twenty or more of flax, etc. To know this and examine statistics, it is ridiculous to find the average yield of corn to be below thirty-five bushels per acre; wheat below fifteen bushels; barley below thirty; oats below forty, etc. Certainly there are some mighty poor-farmers in the land, and a whole lot more that do not farm in the most profitable manner. If this is the case, we may ask ourselves—in what manner can we, practically and inexpensively, improve the crops?

Crop yields may be improved in three ways, namely, by better cultivation and crop rotation, by applying manures and fertilizers, and by the use of better seed to keep up a high grade of inherited potency. While the breeders at agricultural experiment stations are doing much to improve the standard of our field crops, the field is not theirs alone. It is entirely within the power of every farmer to improve his crops by one or all of these methods.

By better cultivation is meant the better preparation of the land before seeding. The great majority of our farmers spend altogether too little time in preparing a fine, firm seed-bed. In the corn belt and wheat sections this is especially true. Oats in the corn belt is more than half the time scattered broadcast from the tail end of a lumber wagon. The field is then disked or harrowed once. Corn-stalks are standing everywhere (possibly to hold the oats up). The yields are not as much as the farmer expected. The wonderful corn-belt land is expected by those who have become rich from the fat of the land to produce a big crop under any circumstances. But the fat is fast disappearing. Higher prices of farm lands make it necessary to get larger net returns. The first few weeks of a crop of grain is an important period in its development. If the land is not plowed, disked and harrowed until it is fine and firm, no one need expect the best returns from his labor and seed. Broadcasting oats in standing corn-stalks is slovenly. In connection with the better cultivation, comes the rotation of crops, a much-discussed subject of the day. The better physical condition of the soil, ridding the land of weeds, better yields, etc., are items that should not be overlooked in arranging the different classes of crops in a systematic rotation.

The application of farmyard manures to our rich loam soils have been shamefully neglected. The lands are becoming depleted of humus and fertility. Some, especially in the East, have resorted to commercial fertilizers in maintaining yields, but a graver mistake could not have been made. Barnyard manure supplies the humus so necessary in the soil to keep it in good physical condition. Commercial fertilizers supply no humus, but on the contrary, deplete the soil's supply and are available only the one year in which they are supplied. Western farmers must not make the mistake the Eastern farmers have made. Fertilizers must not be used to take the place of the barnyard manures. If manure is used in connection with clovers and grasses in rotation, there need be, except in a few cases, no commercial fertilizers used in the West.

Better seed is the universal need of the farming to-day. A very great improvement can be made in the farmer's yields by carefully grading the seed in a fanning mill, saving only the largest, heaviest and plumpiest and the most mature kernels. This, however, is not sufficient for the progressive farmer. He wants to use a more intensive method, and get a correspondingly better grade and higher yield of grain. Yet he must not exceed the range of practicability. He must not neglect his regular farm-work for the minor details of selective breeding that are so fascinating. In other words, he wants to go just so far in the work as to warrant a large measure of success. How, then, can this be done.

The solution is not a new one. The farmer who picks out enough ears of corn from his harvest to get seed for the next year's crop has solved the problem. He has (in his way) selected the best individuals, just as the stock raiser has done, to keep up the variety or breed. This is well known to all corn raisers. But how can this be done with the small grain—oats, wheat, barley, etc? Again we have a case to cite. Certain well-known and valuable varieties of wheat, (Hayne's Bluestem and Wellman's Fife) have been originated in that way. Oats may be greatly improved and better adapted to certain localities by selecting the best seed with the fanning mill. Plant these

in a plot by themselves; when ripe, pick from this plot enough of the best-looking, largest, best-filled and most erect heads (panicles) to plant a small patch the next year. Use the best of the rest of the plot to plant the large fields. Plant the seeds from the selected heads the next year and select the best heads as before. Keep this up for a few years, each year planting a seed-plot. Satisfactory and profitable results are sure to come. Several bushels increase per acre will come from such selection in two or three years. A man in Canada cleared \$40 per acre from his wheat, simply because he had selected his seed stock in this way. Why can't a profit be realized by selecting oats and barley?

It is the individuality of the seeds and plants that must be observed if satisfactory results are in the future to be realized from our staple crops. The man who gets in on the ground floor is first to succeed.

### Canada Thistle

In a recent issue "Wallaces' Farmer," gives some good suggestions about eradicating that noxious weed-pest, the Canada thistle. It says:

The Canada thistle is one of that somewhat numerous class of weeds that are propagated by rhizomes, or root stalks from which the buds start, as well as from seed, thus rendering it necessary not merely to prevent seeding, but to destroy the entire root system of the plant. In this respect it is similar to those other vile pests of the cultivated farm in the humid section, the horse nettle, bind weed, morning-glory, and quack grass.

For this entire class of weeds there are but two methods of destruction. One is the entire removal of the root, and the other is strangulation or keeping the leaves from access to the air either by repeated cutting or smothering them out with some ranker growing plant.

We have never had but one patch of it on any of our land, and that was where an old



CANADA THISTLE SHOWING LEAF

1. Flower Stalk; 2. Root Stalk; 3. a Single Flower with Seed.

cabin had been erected by a homesteader many years ago, and the thistle was unnoticed until it had covered a patch of perhaps a fourth of an acre. We killed this in the dry year of 1894 by hoeing it off every Saturday. The operation will be effective much more quickly if after mowing it off the farmer will pour into the stub from a common oil-can a very little of a mixture of one part of crude carbolic acid and four parts of water, shaking the can before each application, so as to keep the ingredients well mixed. This is perhaps the easiest way to deal with a small patch of thistles.

Where a farmer has a small patch of thistles in a field intended for corn he should under no circumstances cultivate this patch with the corn, especially with any of the common cultivators. In doing so he will inevitably distribute the plant and it will be but a short time until his entire field is infested. A single plant, if given enough time and opportunity, will spread over a ten-acre field. Each rootlet that starts out from the plant sends up separate stalks every three or four inches, and it is only a question of time when it will occupy the whole field. Hence the necessity of locating these patches, and at all hazards and at any cost getting rid of them at the earliest opportunity in the way above mentioned.

Where there is a larger area we suggest

letting the thistles grow until they are well in bloom, then mowing and, for security, burning. You must attack the plant at the weakest point, before it has stored up much starch in the roots. After plowing, the ground should be thoroughly harrowed, the roots gathered up, dried, and burned. This will greatly reduce the vitality of the plant. It is doubtful, however, if one year's treatment of this kind will prove effective, particularly so if there should be a season of abundant rainfall.

Thorough plowing and cultivation, sowing to rye and afterwards to mammoth clover, would no doubt tend to smother out or strangle this weed. We doubt, however, whether it would be a complete success, and offer it merely as a suggestion.

### Selection of the Herd Boar

In an address before the Iowa Swine Breeders' meeting, Mr. E. E. Henderson gave some good points in regard to the selection of a boar pig. He said:

In the selection of the herd boar we wish to impress upon the buyer the importance of early selection. Go to the breeder and make personal selection if possible. The boar should be obtained at least two months before he will be needed. Select a vigorous, healthy, well-developed pig, with every evidence of a good feeder, and with the proper markings of the breed represented. Don't buy a boar just because he has a fine heart girth or perhaps a fine ear, good bone or good back, or fine hams, but bear in mind that it is a combination of these good points that produce the pig that we want.

We note the tendency of breeders to suddenly discover some weak point in their breeds, and in their zeal to remedy this, neglect or lose sight of other points just as essential. Thus we have noted buyers in obtaining a sire that is extra strong in heart girth (and aware that the breed at that time is deficient in this point), buy the pig, whether he is good in other points or not. Thus, the first thing we know we have a breed shaped like a wedge.

This defect apparently being as suddenly discovered, we all go after the other end of the pig. The point we wish to convey is: Don't go to too great extremes in correcting deficient points in your pigs. If your sows be too fine-boned, and you use an extra large-boned, coarse sire, the chances are good that you would have as a result of this cross a very un-uniform lot of pigs.

Select a sire with good breeding, but require that he show evidence of this good breeding in his make-up. While we advise against placing too much dependence upon ancestry, or the price that the sire or dam is sold for, in your selection of the worth of a pig, we in nowise advise against the buyer considering the value of good breeding in ancestry, we must remember that the best of breeding does not always produce pigs suitable for breeding purposes.

In the care of the sire, place him by himself away from your other pigs if possible. If in doing this we find him inclined to be lazy and not to take enough exercise, and with insufficient appetite, we would place a couple of small barrows in the lot with him. Feed liberally with an abundance of protein feeds, inducing growth, vigor and muscle building. Never turn him with your sows. Don't abuse him, keep him gentle. When you get a good one don't sell him on the market and buy a new one every year. This we consider a great mistake, and one that is very commonly practiced by the farmers in Iowa. In buying your herd boar remember that the sire is half of your herd, and don't let \$15 or \$20 prevent you from obtaining a good one.

### Build a Good House on the Farm

In a recent issue of the "Practical Farmer," Mr. T. B. Terry makes a strong argument in favor of building a good home on the farm. He says:

In some sections of this country it is quite common for a farmer to live in a rather cheap house on the farm while making and saving some money. Perhaps the first cost of the house was no more than \$1,000. It is very plain, perhaps destitute of modern conveniences entirely and somewhat run down. Then when he gets ahead enough to feel able he rents the farm and moves to town and builds a good modern house, or buys one, costing from \$3,000 to \$5,000. Thousands have done and are doing just this. And they will tell you how much more comfort there is to be got in town.

The comparison is not fair. If they had

built their town house on the farm, and a tenant house for the hired man, they would not see so much difference between living in town and on the farm. Why not move off the old house for the man who rents or works on the farm and build a good modern one in its place, right on the old home grounds, with all its pleasant associations? Why not spend your money where you made it? Why not help to elevate agriculture by your practice and example?

And then a man will live longer, as a rule, to stay on the farm and have some regular business, at least in the line of directing and managing. It is a mistake to move to town, give up work and sit around waiting for death. You will not have as long to wait, and will have more ill health meanwhile, than you would on the farm so managed that you have some regular light business, but need never overdo.

Many of the conveniences of a town home can now be had on the farm. The home can be warmed and lighted as pleasantly and more economically. It can have a bathroom, oil to cook with the year around, a cheerful grate fire in winter, wide, pleasant porches to sit on in summer, the purest of air and water, pure milk, fresh from the cows, fruits and vegetables in perfection, and many now have free mail delivery and telephones. They are coming to all, and also the parcels-post.

And then on the farm one controls his surroundings. He can go to bed early and get the most restful sleep, without noise and hubbub to disturb him and injure his nerves. And when it comes to paying taxes—well, they are just about double in our small town what they are here on the farm. This is no small item to consider. It saved us hundreds of dollars last year. And still I should put first water and food, the quiet and freedom from rush and worry and too much style, the better chance for health.

Time and again people have said to me: "It won't do to put much money into a farm home. The farm wouldn't sell for enough more to begin to pay for it. A good home in town will practically always sell for what it cost."

"Well, it isn't my idea of a home as a place to sell or speculate on. Look on it rather as the home for life of yourselves and one or more of your children after you. If you are not blessed with any children it will be good for someone else. They will often think of you kindly after you are gone. A good modern home will be a pleasant monument to leave behind, better than one made of granite.

I have often noticed the large, commodious, well-painted farm homes in New England, often on land where one can hardly see how money to pay for the building was ever accumulated. It took thrift and economy to do it. But the desire and result are praiseworthy. Every farmer not now so favored, should look forward to and work for a really good, comfortable, modern house on his farm.

### Night Pasture for Cows

In the "Wisconsin Agriculturist," N. H. Petersen tells about the advantages of having a night pasture for the cows near the barn as follows:

I practice a plan on my farm which I think would be of interest to all farmers and dairymen. Instead of keeping my cows in the barn or barnyard each night, I have fenced off a piece of land near my barn which furnishes them pasture and a clean yard. The size of this pasture depends entirely upon the size of my herd. I usually calculate on about ten cows to the acre. As soon as the lot is eaten close and becomes dirty, I change the herd to another similar paddock. At any time when I do not have grass near the barn I sow a piece to barley and oats and clover and thus furnish my herd with a good night pasture. This not only helps the herd, but it also manures a large amount of land. I think all farmers and dairymen ought to practice such a scheme, for it is a great benefit.

### Harvesting Clover Seed

A contributor to the "Indiana Farmer" gives the following points on harvesting clover seed:

Some years it will mature earlier than others, but whatever you do don't harvest it till it gets ripe. The blossoms should be dead and the seed blue. You may think it will shatter and waste; but that will be nothing compared to what will not thrash if cut too green.

Cut it the morning while it is yet damp (not wet) and rake at once, and bunch, or better yet, if you harvest enough of seed to pay, have a clover buncher attached to your mower. If it rains and keeps wet the bunches will need to be turned over, but just a small rain will not hurt them. Do not thrash until dry. It is a good plan to turn the bunches a few hours before thrashing to let the under side dry. Better to waste some seed by shattering off than to not thrash it clean.



### Lice on Cabbage

FROM Montana comes the following query: "Last year my cabbages, turnips and rutabagas were so much infested by gray lice that the crop was ruined. I sprayed paris green on them, but without the desired result. What would you advise?"

You cannot kill leaf lice with paris green. They do not eat, but only insert their beaks into the leaf tissues and suck the juices thus avoiding the poison. You will have to use something that will kill on contact. Among substances suitable for that purpose are kerosene emulsion, hot water, tobacco tea, solutions of whale-oil soap, and possibly others that may be found available. Apply such things freely, trying to reach the under side of the leaves as well as the upper surfaces, and you may check the pest. The nozzle on my knapsack sprayer throws the spray at an angle to the main direction, so that I can easily spray from the under side as well as down from above. This point is of importance.

### Moving Currant Bushes

A lady reader writes that she has four red currant bushes. Fay's Prolific, which will have to be moved to a new spot this fall. They have been in bearing two years. She asks when she should move them, and how she should treat the ground they are to be planted in. Usually it is not a difficult job to move currant bushes, even if of some size and age, to a new location. Wait until the time the leaves begin to fall. Then, or any time during the dormant season, take up the plant, leaving some soil adhering to the roots if possible, dig up a hole large enough to receive the plant in the new spot, and plant it. Pack the soil tightly around the roots, and let it go at that.

Of course, the soil should be rich, or made so by applying some good manure, or such manure may be put around the plants as a mulch afterward. Currants pay well for good feeding and care. I still have the President Wilder, a comparatively new sort, and they are a sight at this time, with their long-stemmed clusters of scarlet berries of largest size. I know of none better for market, and we have no fault to find with them for home canning, either.

### The Season

It takes a season as the present one has been up to this time to arouse anyone's latent energies and enthusiasm for garden work. In the morning I can hardly wait for my chance to go over the place to see how things look; and in the evening I want another stroll over the various garden patches for the same purpose. It seems that the changes in crops due to rapid growth are really remarkable, and noticeable from one day to another. We seem to have one of the old-fashioned fruit seasons. Everything grows; yet there are comparatively few insects, and few signs of fungous diseases.

I have not seen such a healthy growth of potatoes in many years. I spray, not because I must, but only as a precaution against what may possibly come later in the season. I desire to insure my crops by spraying. If no disease would appear anyway, all the better. Spraying eliminates the danger to some extent. It is true, however, that a few potato beetles can do a lot of mischief. Often we think there is hardly a beetle about, when a little later, on closer examination of the vines we find them half eaten up by the slugs that have hatched from the eggs deposited by the few beetles.

Whenever we can set out eggplants and do not have to spray them with arsenical poisons to protect them from the attacks of potato beetles, as we could safely do this year, we may conclude that there are not many of that enemy about. Yet if I had not sprayed my early potatoes, I believe that some plants would have severely suffered—in fact I did find some plants that were not treated early enough badly defoliated by slugs. I have this year seen only a very few specimens of the cabbage butterfly, and consequently the cabbages thus far are almost entirely free from the green worm. Neither have I as yet seen a single tomato worm. A wonderful season, indeed.

### Asparagus for Small Family

A reader asks how many plants of asparagus she should have for a family of five, and which would be the best variety. I answer the last question first. Palmetto is usually preferred as being exempt from rust attacks. Otherwise I find that it makes very little difference what variety one plants. We can grow

good "grass" with Conover's Colossal, Mammoth Columbian White, Giant Argenteuil, or Barr's Mammoth, or with a number of others.

It is not necessary to dig the manure down in deep trenches. The soil should be very rich, it is true. Apply plenty of good, well-rotted manure all over the surface, and mix it into the soil by means of plowing or spading, and this as deeply as can be done conveniently. Then open a furrow six or eight inches deep and set the plants, preferably strong one-year old, into the bottom of the furrow one to two feet apart. A row one hundred feet long, requiring about seventy-five plants, more or less, should give you all the asparagus that your family of five would want, and possibly more. It depends on the eating capacity of the five.

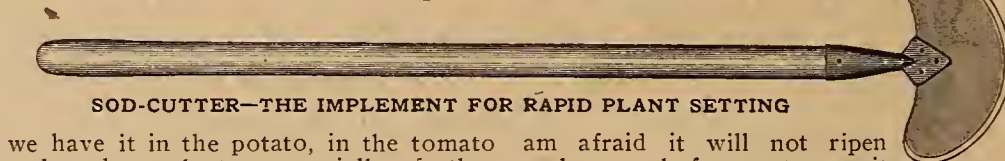
Our own family just about lives on asparagus and potatoes during the asparagus season, and consequently it requires a big bed to meet our wants. But a hundred feet of row in full bearing will do it. For most families much less would answer. In many cases it would be more convenient to have the asparagus in a bed by itself, and any rich spot would come all right for it. The plants might even be set two feet apart each way in a solid block, but I would always set them deeply enough that the whole patch could be plowed in the spring with a shallow-running one-horse plow, without endangering the safety of the asparagus crowns underneath.

### Melon Diseases

A reader in Virginia asks whether spraying with Bordeaux mixture will prevent blight on watermelons and muskmelons, and if so, whether the ready-made Bordeaux advertised by the trade can be depended upon.

As in the case of the tomato, there are several different diseases or "blights" which are liable to attack the plants. Here we have usually only a blight of fungous origin to fight. This is an exterior blight which can be kept in check by spraying. The application should be made thorough and often enough to keep the foliage well covered with the mixture at all times. I often spray muskmelons, cucumbers, squashes, etc., every ten days or two weeks, simply as a precaution.

If the blight is of bacterial origin as



SOD-CUTTER—THE IMPLEMENT FOR RAPID PLANT SETTING

we have it in the potato, in the tomato and other plants, especially further south, then all the spraying one could do would not mend matters. The plant wilts down and dies, and that is the end of it.

I prefer to prepare my own Bordeaux mixture, making it fresh for every treatment, and as stated repeatedly, I use sal soda in place of lime right along, and find the mixture very adhesive and quite effective.

Watermelons seem to be more susceptible to injury from spray applications, and for that reason, I am usually not quite so lavish with my spray on the few hills I grow here, and would advise caution in this respect. On the whole, I believe that regular spraying is good, and perhaps necessary, for all these vines.

### Setting Cabbages Rapidly

The other day I started out to plant about five hundred cabbage plants. It was considerably after ten o'clock in the forenoon when I began pulling the plants in the patch. I carried them in a basket to the field. I was back at the house, the job finished, at a quarter of twelve, so that it had taken me only an hour and a quarter to set more than five hundred plants. Many persons would spend two or three hours at the same job.

In fact, I believe I struck the quickest method yet of setting plants by hand. It was done with the help of a tool known as a sod-cutter, being a straight blade in the shape of a half-moon, and quite sharp. I held this in my right hand, carrying the basket of plants in my left. Holding this tool about midways of the handle, I thrust it into the ground like a spear, pulling the handle towards me, then picking up a plant from the basket and inserting the roots into the ground behind the sod-cutter blade, and, after

## Gardening

this was withdrawn, pressing the soil against the roots of the plant with the heel of the right foot.

This tool seems to me a great improvement for such purposes over the spade which I have heretofore been using in setting cabbage, strawberry and other large plants. It is backaching work when one has to keep at it all day. It is quick work when only some hundreds or a thousand plants are to be set.

Probably the work would be still easier if the plants are first dropped over the patch in their respective places. It would then not be necessary to carry a basket. But the best way, by far, would be to let a youngster carry the plants and insert them while the other fellow handles the sod-cutter. At least it would save him the ache in the back. The quickness of the work, however, counts for much. The ground was a little dry and lumpy when I set the plants; yet every one is now growing nicely, and just as well as if we had consumed two or three hours in planting.

### Sowing Onions for Spring

What variety to sow in the fall to get good green onions in early spring is the question. As repeatedly stated herein, I sow two varieties only, the Welsh and the White Portugal or Silverskin. Of the former my plants are already up and had their first cultivation with the wheel-hoe.

The Welsh onion is a very free seeder. I have two rows each about two hundred feet long, the seed having been sown in summer of 1904, parts of the rows taken up in spring of 1905 for bunching and bunches of plants being left at intervals of a foot or so. They yielded a number of pounds of seed last summer, but now are a perfect sight, promising to give twenty or more pounds of seed.

This new seed comes just in time for sowing again for another year, although I prefer to sow in June or July, using old seed. This onion is perfectly hardy.

The Portugal grown from seed sown in August has wintered perfectly here for four years in succession. It makes a splendid green onion for bunching in May and June. I advise all my friends who are lovers of early green onions to try it. It is now just the right time to sow it. Of course you will have to use last year's seed, which may be obtained from any large seedsman. I have a lot of seed growing, but

### Success with Rambler Roses

Mr. Greiner's reference to the Crimson Rambler in the July 1st number of FARM AND FIRESIDE moves me to relate my own experience, with the hope that it will be helpful to somebody else. When I moved here in the spring I found three Ramblers on the premises. I knew practically nothing of their cultivation, and so went in for practical learning.

First, finding many of the canes and twigs dead from freezing and other causes, I pruned severely, cutting out also all shoots that would have a tendency to make the plant unshapely. Next, I enriched the soil with new earth and fertilizer, and gave occasionally a light cultivation with the hoe.

The spring proved to be rather a dry one, and a good many waterings were given before the coming of June rains. Meanwhile myriads of green lice appeared, also a few worms. These were attacked with the hand-sprayer (costing only seventy-five cents) and a cake of sulphur-tobacco soap (costing twenty cents). Repeated sprayings finally conquered, though the marauders accomplished some mischief, and the spraying solution had a tendency to leave an unattractive sediment on the foliage. The application of water from a hose would have proved an excellent remedy against these depredators, or copious showers would have answered the same purpose, but neither were available.

The net results for the three plants are these: One, on the south side of a wall has been a veritable thing of beauty. The crimson clusters are yet hanging thick, but of course past their prime. The plant covers nearly fifty square feet, and is literally loaded with blossoms. It has created much favorable comment. The second plant, on the south side of a porch, and clinging to a pillar, is a good bit shaded with trees, with the result that its blooms are blighted and its leaves and canes are rendered unsightly with mildew. Sulphur has proved ineffective and another season will find this rose (large as it is) removed to a sunny situation. I have learned that unobstructed sunshine for at least half the day is a vital necessity to the Rambler. The third plant, fastened to a pillar on the northeast side of the porch, did well as to bloom, but it is only recently making any new growth. Each of the other roses has grown fine new canes, one great shoot on the second being already six or seven feet long. I must say for the poor grower, however, that the moles worked among its roots badly, and no doubt weakened it a great deal.

All in all, my first season's experience in rose growing has been a pleasure in spite of a few disappointments, a real triumph in some respects, and a pretty fair education for still more success in the future.

Pennsylvania. JOHN A. SIMPSON.

### Good Lettuces

There are three groups of lettuce which are easily recognized: 1, Butter; 2, Crisp; 3, Cos.

Varieties of the "butter" class are most generally regarded as the best quality, and are especially valuable for home growing. Some of the best of these, such as Half Century and Hartford Bronzed Head are so delicate and so tender that only real connoisseurs care to grow them. The leaves of this class are soft, almost oily in texture, the veins small, and the edge of the leaf smooth, or nearly so.

The "crisp" varieties are harder of texture, the leaf is more or less fringed, and the midrib and veins are large. Grand Rapids is a well-known variety of this type, which is a favorite with market gardeners, because the harder, crisper leaves stand shipping so much better than do the soft ones of the butter class.

In the "cos" or "romaine" lettuce we get a totally distinct type of long, very hard leaf, with coarse midrib and veins. They stand shipping well, and are much stronger in flavor than either of the others. For table use the leaves generally have to be cut, as they do not break easily, and so they make a less attractive appearance than either butter or crisp kinds. English gardeners and English cooks rate the cos lettuces very highly, but its quality in America is not up to the British standard. These varieties are good for hot weather, however, and have a pungency and sweetness quite different from what is found elsewhere. The amateur should try a few plants of Paris White Cos. Not all lettuces make solid heads. People who like the young, tender, blanched inner leaves of cabbage-head lettuce must be careful to select a variety that is not a "buncher." Each of the three classes already described contains varieties that are normally either heading, or bunching, though in describing the cos class the terms "self-closing" and "loose" are used to express the same ideas.—L. and E. M. Barron in July Garden Magazine.

### The Onion Maggot

J. S., a Wisconsin reader, tells how he saved his onions from the attacks of the onion-root maggot as follows:

The maggots get very numerous in this section, especially when the field is left unworked for over a week. I dug the earth from the roots until the onion roots were bare, and then I scattered wood-ashes very plentifully about the plants. The onions grew and made a fine crop. The dirt should be kept away from the roots.

This will work well enough in a small patch. Applying whale-oil soap-suds freely to the onions would suit me much better in a larger patch.

*J. Greiner*



## Peach Culture

**I**N A bulletin on peaches by the Ohio Experiment Station, Greensboro, Carman, Belle of Georgia, Champion, Elberta and Gold Drop are recommended as being best adapted for unfavorable peach sections and as being good "dependable" sorts. Of these the Champion and Elberta are put first as being nearest the present standards of excellence for home use and the market.

The bulletin takes up the general discussion of peach raising in Ohio. We quote the following:

There are two methods of culture which may be safely recommended for Ohio conditions, namely: clean culture, with cover crops and mulching. Where the ground is comparatively level the cover-crop method is admirably suited to peach culture. The soil of the orchard is plowed or disked as early in spring as it is in condition to work well, and the surface kept clean and mellow with harrow, cultivator or weeder until about the first of August, when some cover crop should be sown. Soy-beans are excellent, as are also cow-peas, medium-red or mammoth clover, crimson clover and vetch. A mixture of Canada field peas and oats is good. Soy-beans, or cow-peas, are preferably drilled in with a grain drill, using full feed every third hoe, and stopping those intervening. This makes the rows about two feet apart, permitting one or two cultivations to be given, which are very beneficial in starting the young plants. We use about three pecks of seed per acre. Of oats and Canada field peas, mixed in equal proportions, about two bushels per acre. Clover at the rate of fifteen or twenty pounds per acre.

The cover crop is allowed to remain upon the ground over winter, holding the snow and protecting the soil from washing and the roots of the trees from injury by freezing. The matured crop is turned under early the following spring, and cultivation continued as before, to be followed in turn by a successive cover crop. Under this system the soil becomes spongy and friable with its content of vegetable matter, thus increasing its water-holding capacity and improving its fertility and mechanical texture.

For steep, rough ground, not adapted to cultivation, the plan of mulching is excellent. The trees, planted in sod, are at once heavily mulched with strawy manure, straw, or other coarse material that will conserve moisture and keep down weeds and grass about the trees. A luxuriant growth of grass, to be mowed two or three times each growing season and allowed to lie upon the ground, or raked up, divided and added to the mulch about the trees, is to be encouraged. The mulching, in lieu of cultivation should be steadfastly maintained if the best results be desired; and if this be done, peaches will succeed quite as well upon the roughest, steepest ground as in level, cultivated fields.

## Blackberries Drying Up

Gatebo, Oklahoma—I cannot state definitely from your description of your blackberry trouble what the cause of it is. It is my opinion, however, that injury is caused by some disease. I would like to have you send a sample specimen of the dead portion, cutting it way down to the part of the plant that is still alive. Without this it will be quite out of the question to answer you definitely.

## Rose Insect

J. R., Pearl River, La.—I do not know what the yellow insect is that affects your rose-bushes, and would like to have you send on specimens of same. Place two or three of these in a small, tight, strong box, and send them to me by mail.

## Rose-Bugs

S. H., Manchester, N. H.—In my opinion the only practical remedy for rose-bugs on rose-bushes is hand picking, which, if persistently followed, is very successful, and where the picking is attended to every day it does not take a great deal of time. The work should begin as soon as the bugs appear.

## Grape-Vines Bleeding

F. C. S., Hugo, Minn.—I do not know why it is that some grape-vines will occasionally bleed badly in the spring, even when pruned in autumn. As a rule this is not the case. I think, however, that they are seldom seriously hurt in this way.

## Caterpillars on Grape-Vines

A. T.—The caterpillars that ordinarily infest grape-vines may be destroyed by spraying the foliage of the grape-vine with paris green and water at the rate of one pound to one hundred and fifty gallons. After the paris green has been put in, add

an equal amount of quicklime. If the foliage is sprayed with this the caterpillar will be poisoned.

## Peach Tree Dying

I. H., Detroit, Michigan—I think the trouble with your peach tree is that it is badly infested with the ordinary peach-borer, and it is where injuries have been made by this insect that the gum oozes out as you describe. The best way of overcoming the work of this borer is to look over the trees in the spring, and again in July, and with a small knife dig out the borers. It is possible that so much injury has been done your trees already that they will not recover, but you had better look them over at once, and you will probably find where the gum is exuding that the bark is discolored, and if you will follow the tunnel along under the bark you can easily destroy the borers. They will probably be three fourths of an inch long at this time of year. Remove all dead bark and borers, and cover wounds with grafting wax or clay.

## Spraying Peaches

The San José scale, peach-leaf curl and peach yellows are the most formidable enemies of the peach grower. For the yellows there is no known remedy but to remove the trees, root and branch, and burn. The San José scale and leaf-curl may be effectually combated at one and the same time by the early-spring application of the lime-and-sulphur wash, prepared from fifteen pounds lime, fifteen pounds sulphur and fifty gallons of water. (See Station Spray Calendar for formulas.) Where the scale is not present, spraying for leaf-curl with Bordeaux mixture, just as the buds are swelling, is quite effective as a preventive measure. After the foliage has expanded is too late to spray for the leaf-curl. Peach scab or spot, however, is prevented by later sprayings with half-strength Bordeaux mixture—two pounds of copper-sulphate, two pounds of lime to fifty gallons of water.

In all spraying of peach trees thoroughness in every particular is very desirable. Not only the twigs and branches and foliage must be touched in every point, but the main branches and trunk of each tree should be covered and coated in every part and crevice. Those who place the greatest stress upon this deluging of the bodies and branches of their trees are the ones who possess orchards of the highest degree of soundness, health, vigor and fruitfulness.—Ohio Experiment Station Bulletin.

*Samuel B. Green*

## Horticultural Science

At a recent meeting of the Society for Horticultural Science, held at Cornell University, about thirty enthusiastic workers were in attendance.

Prof. L. H. Bailey, dean of the New York State College of Agriculture, presided and delivered an interesting address on "The Field for Experiment in Horticulture." Dean Bailey claimed that much good work had been done by the horticulturists of the experiment stations and others, but most of this work was in the nature of observation, extension and dissemination. Comparatively little had been done in the way of original research.

The time had now come when work of a more fundamental character should be undertaken. The tree of horticultural knowledge has given magnificent promise by its foliage and its bloom. It is now time to gather some of the fruits of patient, well-directed, scientific research.

Among the papers presented was one by Prof. L. C. Corbett, of the United States Department of Agriculture, on "The Future Application of the Term Horticulture."

Etymologically, horticulture means the cultivation of a garden, or the mode of cultivation employed in a garden. Another definition is that department of the art of agriculture which relates to the cultivation of gardens, orchards and ornamental plants.

In this country horticulture is now subdivided into four distinct heads, namely, olericulture, pomology, floriculture and landscape gardening. Even these subdivisions do not cover the whole meaning of the term as we interpret it to-day. "Plant breeding" and the great nursery industries should be included, and to the

## Fruit Growing

divisions named we should add the breeding of plants and plant propagation.

"Some Phases of Pollination" was the title of a paper by N. O. Booth, of the New York Experiment Station at Geneva. Among other things he said that the question of the potency of pollen as a factor in the fertilization of the blossoms of fruits is comparatively new. Tests with grapes had shown that the vitality of the pollen was the chief, if not the only factor which determined whether a given variety was self-fertile or self-sterile.

This naturally suggested the query as to whether the same conditions did not exist among other classes of our cultivated fruits. To determine this an investigation was started to prove if possible the self-fertilizing capacity of various varieties of the apple. The vitality of the pollen of many varieties was tested with varying results. With the apple there are very few varieties with all pollen good, none of those examined showed all pollen bad, and by far the greater number showed different proportions of good and bad. Some varieties seem to have a constitutional weakness in the way of pollen production, although the vitality varies with different conditions.

Some years the pollen of a given variety has a low germinating capacity, while in other years the same variety will give a much better pollen. Three varieties of apple in which the pollen appears notably weak are the Gravenstein, Tompkins, King, and Esopus Spitzenburg. Five varieties in which the pollen was particularly strong are Jonathan, Wagener, Rawls, Wealthy and Missouri Pippin.

"Pollination Methods" was a subject fully discussed by Prof. S. W. Fletcher, of the Michigan Agricultural College. The past ten years have witnessed a remarkable revival of interest in cross-pollination and hybridizing, and the aim of the writer was to gather together the experience of a large number of workers in this field.

Pollination unlike most experimental work must be done in a short space of time, when trees or plants are in blossom, and one is likely to see no results from much of the work. As might be expected, there are bound to be many failures, but occasionally some inspiring successes. This work though more uncertain, and often more discouraging than many other lines of experimental horticulture, has a fascination that is its own reward.

Prof. E. J. Owen, of the New Jersey Experiment Station, treated of the "Importance of Selection in Plant Breeding." Plant breeding is to-day one of the foremost topics in the plant world. A correct general practice of the subject may be summarized under five heads as follows:

1. Have a thorough knowledge of the plant characters.
2. Formulate a clear idea of the end to be accomplished.
3. Make a wise selection of the variety or varieties.
4. Increase the opportunity for selection by the cultivation of many individuals.
5. Submit the selected plants to a thorough test.

He who benefits humanity by giving to the world a new fruit, a new vegetable, or by improving a known variety does not live in vain.

Among other papers read were the following: "The Relation of Winter Apples to Hardiness of Tree," by Prof. W. T. Macoun, of the Atlanta Experiment Station, Canada. "The Use of Colored Cloth in Shading Plants," by W. R. Lazenby, of the Ohio State University; "Influence of Artificial Light on Plants," by John Craig of Cornell University; "Apple Rots in Commercial Cold Storage," by H. J. Eustace, New York Experiment Station, Geneva; "Dwarf Apple Orchards in the United States," by C. D. Wilson, of Cornell. The officers elected for the ensuing year were as follows: Dr. L. H. Bailey, president; G. B. Brackett and T. V. Munson, vice-presidents; V. A. Clark, secretary-treasurer; U. P. Hedrick, assistant secretary; W. R. Lazenby, chairman executive committee; and C. B. Close, chairman program committee.

The society voted to hold its next annual meeting in connection with the biennial meeting of the American Pomological Society, which will probably be held at Norfolk, Va., during the Jamestown Exposition. WILLIAM R. LAZENBY.

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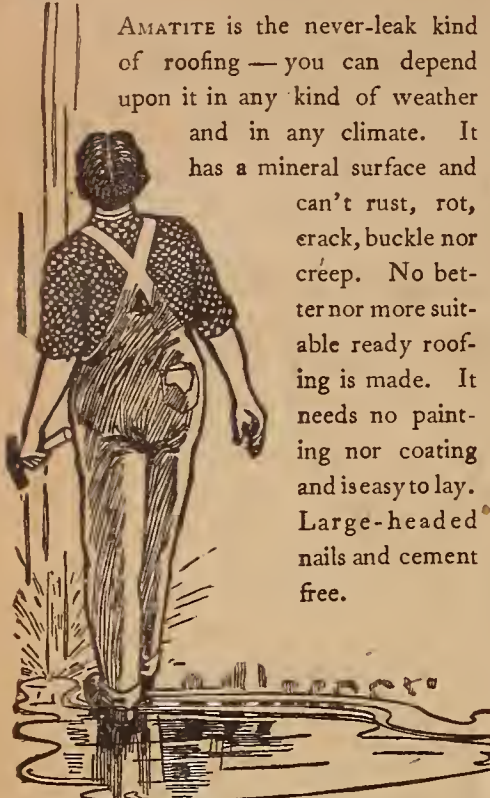
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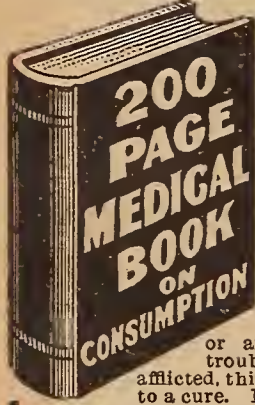
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# Poultry Raising

## Late Summer Chicks

Many farmers do not care to have the hens hatch broods late in the summer. As forage and foods are cheaper in summer than in early spring it should pay to hatch chicks if given attention. Three-pound chicks bring good prices late in the year. It should be the rule to hatch chicks every month in the year if the hens will sit, for the reason that in summer there is usually a large amount of waste material that can be utilized, and if the prices in market are not satisfactory the chicks can be consumed at home. Hundreds of farmers live on purchased meat when they can easily supply themselves with poultry at less cost, as during the summer season little or no labor is required with chicks, while the food should cost nothing. It is not profitable on a farm to abandon the hatching of chicks as long as the conditions are favorable for them. The large lice are very destructive to late chicks, but remedies and precautions must be used to prevent such pests. Late-hatched chicks give a profit, and the farmer should not overlook the opportunity they offer for increasing his revenue.

## Plymouth Rocks

For many years there was but one variety of Plymouth Rocks—the Barred—and it was considered a very desirable one for the farmer. Breeders, who claim all new varieties, or strains, of a breed as "sports," have added two more to the list of Plymouth Rocks, as there are now

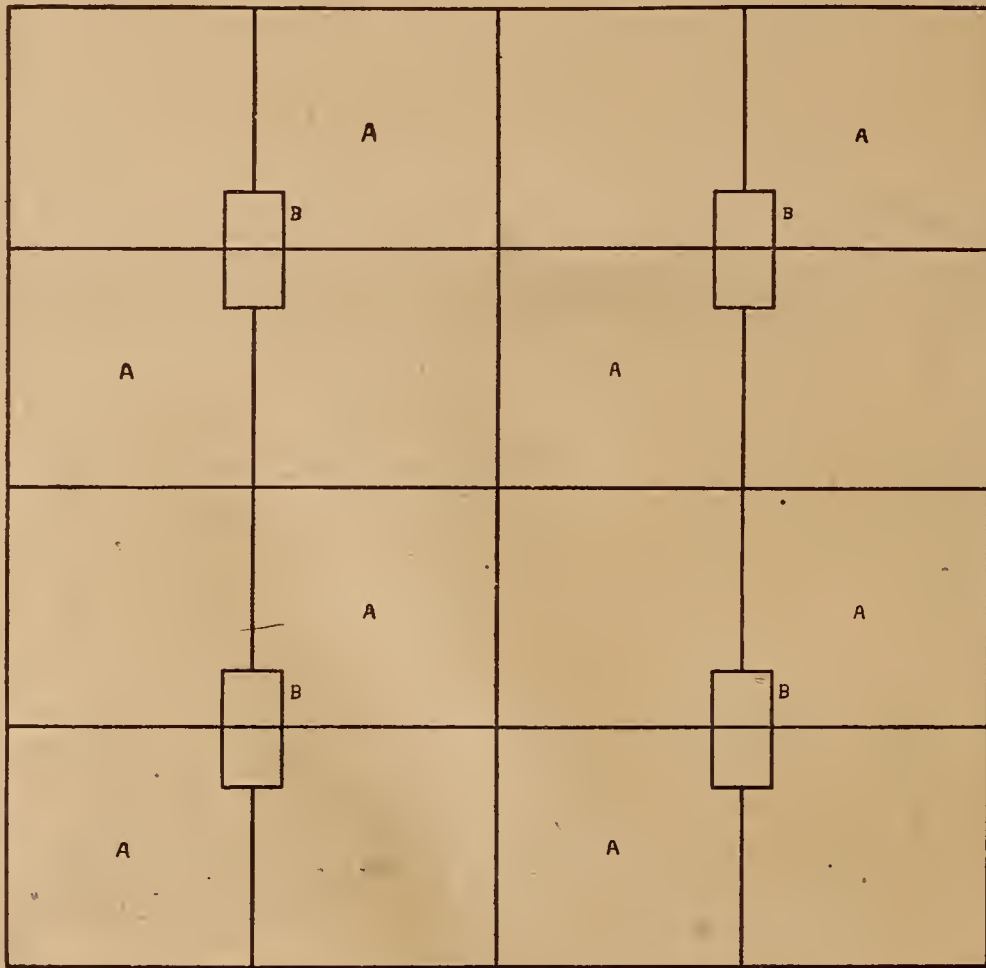
portunity to forage. They are as near the "perfect" fowl as any breed (though no breed can be said to fulfil all requirements), and are the favorites on hundreds of farms.

## White Meat on Squabs

In the markets the squabs that are white-meated bring the higher price, and inquiries have been made as to how to feed in order to have the lighter-colored flesh. So far as feeding is concerned, the squabs are fed by the old birds, which select the foods according to instinct, and even with a variety of foods the attendant has but little control. The squabs with white flesh are those killed before they can fly; that is, the younger the squab the lighter the flesh. If the old birds are kept well supplied with a variety of food the squabs will be fat and attractive.

## The Broiler Age

The time allowed for a chick to reach the market after being hatched depends upon many conditions. Warmth and food are the main factors. To make some kind of estimate as to when young chickens should reach the market, allow three months from the day the eggs are put under a hen or in an incubator. Three weeks of that time must be deducted for incubation, which leaves ten weeks for the growth of the chicks, at the end of which period they should weigh one and a half pounds each, if rightly managed. The chicks of some breeds grow more rapidly than others, while those that have been



### HOW MUCH LAND?

The ground-plan shown is for a plot of land two hundred feet square (a little less than one acre), divided into sixteen enclosures, each being 50x50 feet. At the intersection of every four yards are poultry-houses (B B B B), each 12x24 feet, divided into two apartments, each 12x12 feet, each apartment to contain twenty-five fowls, two hundred per acre. While occupying the enclosures (A A A, etc.) green food may be grown in the other yards. By this system of two yards to each flock the males will be completely separated and cannot quarrel and fight

the White, Buff and Barred varieties, which differ only in color of plumage. The Plymouth Rocks were originated by crossing the Dominiques with Black Javas, and they are considered one of the best for practical purposes. They are hardy, easily reared, are good layers, mature somewhat early, and attain a large size, as well as being excellent table fowls; they are clean-legged, with yellow skin, and make an attractive market fowl, excelling as market chicks. Crosses of this breed, and even the pure breeds, have attained the weight of two pounds at ten weeks of age, but this was by a high system of feeding. That chicks will reach one and one half pounds at that age is well known, but too much should not be expected unless they have the benefit of care. While they have tall combs, they are not as objectionable in that respect as the Leghorns, and rarely suffer from frosted combs. There is one objection to them, however, but which some contend is an advantage, which is that they easily become too fat; but such is not the case when they run at large and have an op-

portunity to forage. They are as near the "perfect" fowl as any breed (though no breed can be said to fulfil all requirements), and are the favorites on hundreds of farms.

### How Much Land?

FARM AND FIRESIDE receives many inquiries which are interesting to a large number of readers as well as to those who write for the information desired, but owing to circumstances it is often difficult to give a satisfactory reply to all. A lady in Virginia desires to know how much land is required on which to keep five hundred hens, and also if the fowls should be divided into small flocks. She desires to know what to grow for them, and how the poultry-houses should be constructed.

To enter into details requires a large space, but it may be mentioned at the start that no one should venture to keep five hundred hens until sufficient experience teaches how to manage smaller numbers; that is, it is best to begin with a few (not over fifty fowls) the first year, gradually

increasing the number until the desired object is attained. The large majority of failures result from mistakes made in the beginning, and if beginners will be patient, progress gradually, making experiments on a limited scale, and keep an account of all receipts and expenses, better results will be obtained than to attempt to enter into the poultry business at once with large numbers, especially if the capital to be invested is limited.

How much land to use cannot easily be estimated. If the fowls are to be kept in flocks of twenty-five each (which should answer with some) and confined, no food can be grown for them unless each flock has two yards, so as to permit of alternating them. Allowing space for pathways, etc., an acre (to use round numbers, is about two hundred feet square) will give sixteen enclosures of fifty by fifty feet each. The sixteen enclosures, or yards, permit of keeping two hundred hens on an acre. If each flock is given two yards, so as to alternate them, growing green food in one while the hens occupy the other, changing as required, the yards allow fifty by one hundred feet space to each flock of twenty-five fowls.

Of course, to confine two hundred hens on an acre of ground as suggested would entail considerable expense for fencing, and the use of four poultry-houses, each twelve by twenty-four feet, divided into two apartments, each apartment being twelve by twelve feet, which should be ample space for twenty-five hens in each apartment. It may be mentioned that opinions differ widely regarding the space required in poultry-houses as well as to the area of land necessary for each flock, while designs of poultry-houses vary to such a degree as to render it almost impossible for uniformity to exist, the large majority usually building poultry-houses at the least cost, and often without due regard to the objects in view.

If large numbers are to be kept by giving the fowls the liberty of the farm, so as to permit of foraging, the houses should be not less than two hundred feet apart. If each flock is confined in its own poultry-house for a few days, it will not unite with the one on an adjoining space, and no fences will be necessary; in fact, any hen straying off to become acquainted with the members of the next flock will be promptly driven away by the jealous females of that flock, while the males will respect the imaginary boundary lines, especially if the birds are separated into flocks when young, and the poultry-houses are painted in different colors, in order that the fowls may easily recognize the houses and locations, so as to know their homes.

There are many kinds of foods to grow for the fowls in yards, rye being seeded down in the fall for an early spring forage supply, which may be followed by lettuce, rape, corn, peas, millet, or anything that they will eat, as the fowls can be changed from one yard to another when the green food is only a few inches high, the yard recently occupied to be spaded and seeded down. If the hens are foraging they will be able to secure all the green food necessary, and not more than one hundred hens per acre should be the rule. The fowls must be allowed grain, meat, etc., according to circumstances.

If crops for poultry are to be grown and harvested, other than the grains, it will be well to grow something by way of a variety, such as sunflower seeds, Soja beans, millet seed, sorghum seed, and even cow-peas, while a patch of clover will always be of advantage.

It will be a risk to buy five hundred hens with which to begin, as they must necessarily be procured from a dozen or more sources, and disease and vermin will no doubt be brought on the farm. Select one of the pure breeds, making hardiness the main requirement, and begin with a few, annually picking out the best, adding more to the flock each year until the number is complete.

An excellent poultry-house may be eight feet high in front, six feet high at the rear, and twelve feet square, with tarred-paper roof; open sheds being used in connection therewith, if preferred.

Success will depend on the man and his attention to details. Climate, soil and location are also factors. An acre will not pay as much with cows or crops as it will with hens, for if only fifty hens are kept upon an acre of land, and each hen gives a profit of one dollar a year over expenses, it will be a much larger return than is derived from an acre devoted to some other purpose. The reader must have capital to succeed, but the hens will gradually create the capital if he will be patient and hatch his young pullets every year, so as to gradually build up a large flock.

*P. H. Jacobs.*



The Belgian Horse in the Prairie States

FARMERS in the Middle West are paying more attention to the production of heavy horses than at any time during the last twenty years.

Quite recently a team that had been bred on different farms in La Salle County, Illinois, were matched and sold for \$750. The team weighed nearly 4,500 pounds. They were Normans less than four years old.

In Iroquois County a team of German coach horses were taken from the plow and sold for \$1,500.

The Belgian horse has become a great favorite in the prairie states. Farmers are needing heavy horses, not only for their own use, but to meet the great demand that is being put up for drafters in the larger cities. There is a great deal of crossing of the Norman and Belgian, and farmers who have farms in hilly country are getting a deal of good use from the German coach, many of which are being bred for heavy farm-work. Some of them weigh 1,600 pounds. The other day a team of this type of horse sold in central Illinois for \$900.

Farmers are buying stallions largely on the club plan, by which a community gets the service of blooded horses for brood mares of good blood. Some of the breeders and farmers are buying good mares in the city markets. Some of these mares are known to be in foal from pedigreed stock. They are frequently sold low, and there is a good profit in raising the colts. The colts are trained on the farm, and are developed into good carriage horses. This is largely a practice of some of the Wisconsin farmers.

J. L. GRAFF.

The Cold Curing of Cheese

Recent investigations in the manufacture and curing of cheese have determined some interesting questions as to the relative advantages of cool curing, where the rooms are kept above 50° F., and cold curing, with the rooms at temperatures ranging from 30° to 50° F., and the results of these investigations have just been published in a bulletin of the Dairy Division, Bureau of Animal-Industry, United States Department of Agriculture. This bulletin gives also a summary of previous experiments carried on at the Wisconsin Agricultural Experiment Station and at the Ontario (Canada) Experiment Station.

In these earlier experiments at the Wisconsin Station it was shown that the curing of cheese at temperatures above 60° F. was apt to be unsatisfactory, while that cured at the lower temperatures, from 50° to 60° F., remained longer fit for consumption and had the better flavor according to the standards of that time. With lower temperatures for curing, the quality of cheese appeared to be more uniform and the product brought higher prices. Some bad effects followed storing at temperatures low enough to freeze the cheese, but they were only temporary. The Canadian experiments showed that the temperature of 40° F. for the curing room gave very satisfactory results, and that there was not only a uniform quality secured, but also very little loss of weight. It was made plain also that the temperature of 55° or 60° F. would not check many of the undesirable ferments which may occur in the ripening of cheese.

Mr. C. F. Doane, dairy expert in the dairy division, planned and executed a series of experiments to study, under factory conditions and on a commercial basis, the problems of temperature in curing and storing. The factory with which cooperation was arranged in this case was at Plymouth, Wisconsin, and had a capacity of 15,000 pounds of milk daily. The cheeses investigated were made by the Cheddar process from June 19th to August 24, 1905. In these experiments the usual amount of rennet, three ounces to one thousand pounds of milk, was used for one half of the cheeses, and twice the amount, or 6 ounces of rennet to one thousand pounds of milk, was used for the other half.

The output used in these experiments amounted to fourteen "Daisy" cheeses daily. Two of these were stored immediately in the curing room having a temperature of 32° F., two were stored in the curing room having a temperature of 40° F., and two were cured in the factory curing room at a temperature of about 65° F. The other cheeses remained also in the factory curing room until, at the end of the week, two were placed in the curing room having a temperature of 32° F., two in the room at 40° F., and, at the end of two weeks more, two more cheeses were placed in the 32-degree room and two more in the 40-degree room.

The cheese was examined and scored January 6, 1906. The judges were Mr. U. S. Baer and Mr. C. A. White, of Wis-

Live Stock and Dairy

consin, and Mr. I. W. Steinhoff, of Statford, Canada. The results of the testing show that there was slightly less loss of weight in the cheese put into cold storage at one week of age than in that stored at two weeks.

In the case of the low-rennet cheese, that cured at 32° F. directly from the press scored highest, the average being 95 points out of a possible 100, while that cured at 40° F. directly from the press scored an average of 94.3. The cheese cured at 32° F. after one week in the factory curing room scored an average of 93.8, and that cured at 40° F. after one week in the factory scored an average of 90. The cheese cured at 32° F. after two weeks in the factory scored on an average 93, and that cured at 40° F. after two weeks in the factory scored on an average of 90. The low-rennet cheese cured entirely in the factory curing room scored only 81.4.

The results in the case of the high-rennet cheese show that the cheese cured at 32° F. directly from the press averaged 94.4, and that cured at 40° F. directly from the press averaged 92.3. The cheese cured at 32° F. after one week in the factory scored 93.4, while that cured at 40° F. after one week in the factory scored 90.3. The cheese cured at 32° F. after two weeks in the factory scored 91.6, and that cured at 40° F. after two weeks in the factory averaged 90.9, while the high-rennet cheese cured entirely in the factory curing room scored 90.5.

It was also shown in these investigations that taints developed more noticeably in the factory curing room than in cold storage, and that taints once started in the cheese were checked more by storage at 32° F. than at 40° F. It appears also that cold curing derives its value chiefly from its effect on what might otherwise be poor cheese. Another important conclusion is that curing cheese



A BELGIAN STALLION

at 32° F. checks acidity much better than the 40-degree temperature. Mr. Doane concludes that the quicker an acid cheese can be put into cold storage, and the colder the storage, the better the cheese will be.

In popular tests made by placing cheese of these various groups on sale in the markets, it was found that in comparison with the sales of five or ten years ago there is a decided indication that the popular taste is growing toward a preference for mild cheese, either cured or uncured. It appears that the time is soon coming when all cheese, if ripened at all, must be ripened at low temperatures, and the sooner it is put into cold storage the better.—United States Department of Agriculture.

Dairy Notes

Feed early-cut clover hay now every day.

A properly kept cow-stable has no offensive odor.

Look to the water supply. See that it is pure and abundant.

Keep a lump of salt in a box in the pasture, and also in every manger.

See to it that the cows have one good brushing all over every day.

Clean the stalls every day, and keep them well littered with dry straw.

The wise dairyman keeps his calves in airy box stalls, out of the hot sun and away from the tormenting flies.

If the cows have never been disappointed they will always come to meet you and may be easily managed.

Pet the nervous cow; give her sugar and always speak kindly to her and, for that matter, to all cows. It pays.

If you would be successful put no butter on the market that is not of the very first quality—absolutely perfect.

Do not put off the work of washing the dairy utensils. It is not enough to rinse the milk-pail out with cold water. It should be scalded every time it is used.

The cow that fills the milk-pail and also the pocketbook is the one that has had plenty of pure water, plenty to eat and plenty of kind words. She is a happy cow.

Remember, when the cream is ready to churn it should be attended to at once. Do not let other work interfere with this, because the bad flavor often found in butter is largely due to overripening of the cream. M. L. DAWSON.

"From Pasture to Can"

Secretary Wilson, by order of the president, has issued the following proclamation:

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### Property Acquired by Will

G. B. B., Ohio, inquires: "J. inherits property through will. Being of no blood relation, having a will, couldn't J. secure a deed, and sell property? Would the laws of Ohio grant me a deed more than a will?"

Where property is acquired by will no deed of conveyance is needed, as the will serves that purpose. The law now provides that the will should be filed for record in the recorder's office.

### Husband Giving the Wife Note

D. M. J., Massachusetts, writes: "My sister and I shared equally in our father's estate. She is married and resides in Vermont, and has invested money in her husband's business, he giving her a note for the same. In case of his death does that note hold against his estate? If it will not stand, how can matters be fixed, allowing the money to still remain invested, so that the wife can have absolute control of what is her own?"

By the laws of Vermont, the wife is allowed all the rights of a single person in reference to making contracts, except she is not allowed to contract with her husband, and it might be held under this provision of the law that she could not take a note from him. Of this I am not quite sure, but the safer way would be for the husband to make a note to a third person, and then have a third person endorse it over to the wife.

### Forfeiture of Title to Real Estate

G. E. L., Massachusetts, writes: "The school committee in the town of B. hire a tract of land of C. for the purpose of erecting a schoolhouse. The lease reads that they are to have the use of the land so long as needed for school purposes and no longer. The school has been discontinued for over two years, and no use made of the building. C. has sold the land on which the school stands to D., no mention made of the building. Has the town of B. a right to sell or remove the schoolhouse, or can the present owner of the land hold the building? The building stands on a stone foundation."

In a standard law book I find that it is said that "land conveyed on the express condition that it shall be used for a certain purpose, and the grantee abandons the use or fails to comply with the condition, he forfeits the estate. There must, however, be such an abandoning of the use as to indicate an intention not to continue it, to institute a breach of condition to use the property for any particular purpose when there is a cessation of the use." So, if the school authorities have actually abandoned the schoolhouse, and the land is no longer needed for school purposes within the conditions of the lease, then I would say that the land would revert back to the original grantor, and the house being erected on the land, it becomes a part of the land and would go with it. The school authorities might have a right to remove the building if they did so before they had forfeited their right, but whether they could afterward is a very serious question.

### Matter of Drainage

J. E. G., Ohio, says: "There is a large open ditch running diagonally across my farm that can easily be tiled, but I do not know what course to pursue. Said ditch was petitioned to county commissioners some eighteen years ago. It was first dug about five years ago, was again petitioned for recleaning (or rather deepening and widening), but went no further than my land with both petitions, as there is only an eight-inch and a four-inch tile above, that drains about fifty or sixty acres belonging to three different people. As the commissioners are not handy I do not know whether they would give me the desired information, so am writing you. I want to save all the expense I can. What course will I have to take? Will it be necessary to do anything else other than get the consent of landowners above me?"

If all the adjoining landowners agree, I have no doubt the ditch could be constructed without the action of public authorities, but if no agreement can be reached, I know of no other way except to petition the county commissioners to extend the ditch.

### Age of Majority—Right to Sell Manufactured Product

L. M. Z., Florida, writes: "Can you kindly inform me as to the age at which a girl attains her majority in Florida? If a person originates a hair tonic, how can they sell it? Do they have to get a patent on it, then a license, and then advertise it?"

The age of majority of a female in Florida is twenty-one years. A person can usually sell their own product without a patent or a license, unless it might possibly come within prohibition as to patent medicine, which is in force in some states. I do not know whether there is

## The Family Lawyer

Legal inquiries, of general interest only, from our regular subscribers will be answered in this department, each in its turn. On account of the large number of questions received, delay in giving printed answers is unavoidable. Querists desiring an immediate answer, or an answer to a question not of general interest, should remit \$1.00, addressed to "Law Department," this office, and get the answer by mail.

any in your state or not. I rather think there would be no hindrance to your selling.

### Parents' Right to Control Child

A. L. M., Pennsylvania, writes: "What right has a father to a child, the mother having died when the child was seventeen months old? The girl is sixteen years old now. The girl's grandparents took her when she was seventeen months old to take care of. The father went to New York, and after a few years married again. The girl stayed with her grandparents till she was fifteen years old, then she went to work out for one of her neighbors, where she stayed six months then she went to New York for a visit to her father for seven weeks. Her father giving his consent, she is now living with her mother's sister in Pennsylvania. The father has never supported the child since her mother died, but has given her presents for her birthday or Christmas. It is very unpleasant for the child to live with her stepmother and father in New York. Now after he has given his consent for the child to live with her aunt, has he any right to say what she shall do or where she shall go for amusement, like attending simple and respectable parties. And can he compel her to come and live with him?"

Naturally the father has a right to the custody, care and control of his minor child, but this right is not an absolute one. The courts have time and again held that the welfare of the child is to be considered, and if the father has so acted as to become or is an unsuitable person to exercise such care, custody and control, then the court would award the child to some other suitable person. Hence a father, although suitable and proper to be the custodian of his minor child, might so act as to release such right. The mere fact that he has permitted the child to go somewhere else to live would not absolutely forbid him from exercising some control over her conduct. I do not believe that he could compel the child to come and live with him, provided she was at a proper place, properly conducting herself, and in no way doing that which might injure her permanent welfare.

### Liability of Joint Tenant for Taxes

L. H. B., Kentucky, writes: "A. and B. have bought 600 acres (half each) of woodland in southern Kentucky. A. has not paid any taxes on same for five years. Can B. be held for taxes on the whole six hundred acres?"

Yes, I would say that this property being jointly held, that either tenant might be held responsible for the taxes on the whole. The interest of each should be held separately.

### Listing Personal Property for Taxes

S. A. G., Ohio, inquires: "Can I offset a note against my tax list? A note written thus: 'January 30, 1891. Fifteen years after date I promise to pay Clyde Miles, five hundred dollars, without interest until paid.' The note is due."

Under the law it is your duty to list all credits, that is mortgages, moneys loaned out, stocks and like matter. From this item you are permitted under the statute to deduct all outstanding liabilities. As I understand the law, you are not permitted to deduct a debt from the valuation of the personal property or real estate. Debts are only deducted from credits.

### Liability of Township for Action of Township Trustees

J. H. W., Ohio, asks: "A. owns a farm. A small creek runs across it, and crosses the public road, the natural water-course. The trustees fill up the sluice and turn the water in front of a house in a high road. It backed up in a cellar. Can A. get damages from the township? Can A. compel the trustees to put in tile in front of his house? The trustees have built A. one driveway across the new ditch. Can A. compel them to build him a walk to his mail-box, or is he compelled to go over the driveway for his mail, when it is inconvenient to do so?"

In the first place, permit me to say that the township as an organized body, is not liable for the negligent or wrongful acts of its trustees, unless the statute particularly creates such liability, and, so far as

my knowledge goes, the statutes of Ohio do not create such particular liability, and therefore I would say that the township is not liable. The trustees have no right to change the natural flow of the water to the detriment or injury of anyone. They might perhaps be personally liable, but there may be some question about this, but you could certainly go to court and get a mandatory injunction compelling them to change the stream to its natural course, and you could dictate to them whatever you thought fit and proper to permit them to run it in another direction.

### Right of Legatees Under a Will

L. A. S., North Carolina, asks: "A man died twenty-six years ago without children, leaving a will. His wife to have all his property her lifetime. After her death to be equally divided between two nephews. Since the man died, the wife has accumulated some money and property. The wife dies leaving a will of what she has accumulated to her brother's grandchildren. Can the wife's will be carried out, or will the two nephews get everything?"

It is somewhat difficult to answer a question like the above without having at hand the identical wards of the will, but my judgment would be, from what is stated in the above, that the accumulations were the wife's absolute property, and that she could do with the property whatever she might choose, either by will or gift, if validly executed.

### Rights of Party Under Assumed Name

H. D. M., New York, writes: "If a person assumes a name, can they hold property left by a relative? If it is deeded to them in their assumed name, can they hold after the death of a relative who deeds it to them? Could other relatives claim their share?"

The name does not make the person or give to the person any particular rights. The fact always remains to be established, whether the person referred to is the person indicated. It is only for the purpose of identity that a name has any particular signification. Most assuredly the mere fact that the party had an assumed name would not deprive him of his inheritance, etc.

### Mutual Partition of Real Estate

A. B., Virginia, writes: "Two houses and lots were owned by three ladies. Deed of trust on the two houses and lots. One of the sisters married. There was a division of the property. The married sister took one house and lot and assumed the obligation by paying off the deed of trust, she giving up her right in the other house, and the other sisters assumed the debt on their house and gave up their rights in the married sister's house. Now if the husband pays that debt on his wife's house, and taxes, and if his wife dies before him without a will, can his wife's relations at her death get the house? What redress can he have for the money he has spent on the property in case of a divorce?"

If this gentleman's wife should die without making a will, he would have a life estate in the real estate. But if there are no children born, there might be some question about this. The only safe way I should think, would be to have his wife secure him in some way for the debt that he paid. In case of divorce, the court would take all these facts into consideration, and would settle the question of property rights between the parties.

### Property Rights

P. E. H., Alabama, writes: "B. married a girl, and her father gave her some land. B. builds a nice house on the land, worth twice as much as the land. If wife should die first would B. have the right to sell land? If not, what course should B. take as to the right to sell?"

I do not believe that B. would have a right to sell this land, for the title is in his wife, and unless he would have been divested of all control thereto by a court of chancery, he would have a life estate in this real estate. My suggestion would be that the wife should make a will, and in that way secure B.'s rights. She could by will give it to him absolutely, or make such disposition in reference thereto as she may deem proper.

### Absolute or Life Estate Under Will

H. McR., Ohio, writes: "Will you kindly give me your opinion as to whether a wife can will property away coming from her husband by will. There being no children. Item second. I give and devise all of the residue of my estate to —, my beloved wife, to be to her and to her disposal during her life, this being the principal and most important clause of his will, which was signed and witnessed. Part of this real estate came by will from an uncle, and part bought and paid for by himself. Who would it naturally go to her at her decease?"

As a general rule it is not safe to give a construction of the will, unless all parts are at hand to be considered in giving such construction, for as it is the intention of the court to give that construction which the testator truly intended, his intention can be best gathered from the whole instrument. The clause given in the above is certainly not free from difficulty, but it seems to me that what the testator intended was, that his wife should have absolute control over this property, during her lifetime, and that she could dispose of it in any way that she might see fit, either by will or by deed. And that if she did not dispose of it then, it would go to the heirs of the husband, especially that part which he inherited from his uncle. The other might possibly be equally divided between the wife's side of the house and the husband's, or possibly that which the husband acquired by purchase might go absolutely to the wife, but there is too much uncertainty about this to place absolute reliance upon this opinion.

### Right of Road by Prescription or Adverse User

M. A. B., Ohio, inquires: "If a piece of ground has been used by the public for a road for fifty years or more, can any person claim it and fence it up or sell it, saying it originally belonged to his ancestors, or can it still be used by the public when someone is trying to claim it and obstruct the public highway?"

If a roadway has been used for more than twenty-one years by certain persons or the public with the intention to so use it, regardless of the rights of any person who might claim ownership to it, then the roadway becomes a title by prescription, and it cannot be removed therefrom except by petition to vacate a highway as provided by law.

### Forfeiture of Estate by Failing to Claim the Same

J. F. M., Canada, writes: "A relative dying in the state of Florida some two years ago, left an estate of some value, without any direct heirs, or at least without family. He not knowing the whereabouts or anything of his brothers or sisters, left no will. How long, or would the two years bar them from getting it? Could the government take it? Brothers' and sisters' children are living in Canada. What steps would be necessary for them to take to obtain the property?"

No, I do not understand that the laws of Florida would forfeit the estate to the government if not claimed for two years. That is too short a time. I do not know how long a time would elapse, but generally it is much longer than that. Better write at once to some attorney in Florida where the land is situated and ask his advice.

### Cruelty to Animals—Arrest for the Same

E. M. N., Ohio, writes: "Will you please give me the chief points in Ohio law regarding the right of a common citizen (not a Humane Society officer) to have a man arrested who is abusing a sick horse or allowing his driver to do so?"

The statutes of Ohio provide: That whoever maliciously kills or injures any animal (mentioning a large number, the horse being included,) "the property of another, shall if the valuation of the animal killed or injured is more than \$35.00, be imprisoned in the penitentiary not more than five years nor less than one. If the value is less than that amount, be fined not more than \$200 or less than \$20 or imprisoned not more than three months." Under this law, it has been held that cutting off the mane of a horse is an injury within its meaning, and that if the act was cruel or seriously injurious to the animal and was done for the purpose of gain, then no other malice need be shown. The proper way where anyone is injuring an animal of this kind is to go to some justice of the peace or police judge, and make an affidavit to have the man arrested, or else bring the matter to the attention of the grand jury. The better way perhaps would be to consult the prosecuting attorney.



Nemesis

**N**EMESIS, typifying the Greek idea of retribution, brought punishment to the haughty whose position and wealth made them insolent and forgetful of their relations to God and man. The victims of Nemesis were many, but new ones filled the thinned ranks. She is ever busy. The richest man in the world is a fugitive from justice in foreign lands and can never return to his home till the people have forgotten his rapacity or immunity has been purchased by legislative action.

A senator that for a quarter of a century charmed with his wit, controlled the destinies and policies of a party, made and unmade men, a brilliant figure in social circles at home and abroad, is a refugee among the hills, broken in heart and spirit, and leadership forever gone.

An insurance magnate died of a broken heart, others are exiles, others live in fear of prosecution. One horror is forgotten in the revelations of a new. Reforms are promised, but habit is strong and the fierce struggle for supremacy rules.

Nemesis punishes those who use the gifts of God to crush their fellow-man, but it does not change the conditions. A few are taken. The rest riot under cover of indignation at those who have been caught in the act. Does the punishment restore the lost lives, the crushed hopes and ambitions, does it compensate the eager aspirant after true success for the loss he has sustained? Does it compensate the farmer and his family for the long days of toil, that leave him but little better-off at the end of the year than the beginning found him? Does it make the world better? We are all parts of one great whole, and if one of the parts is stunted the whole is injured thereby.

Can Nemesis, the courts, public opinion restore what is lost, prevent a repetition of the means and a multiplication of the agencies? The cause lies deep. As long as a large part of the strength is consumed in wrestling from others a bare subsistence there will be little mental power left for making the whole what God intended it should be. Labor is divine or brutalizing just in proportion to whether it is master or servant of man. If servant, he will have leisure and strength to develop the powers that will bring opportunity for the fullest development. If master, then he simply drags along, doing what a machine could do far better, his dull stupidity bringing to himself and humanity, ill.

The People

Now that attention is diverted for a time from Congress will it not be wise to take stock of the people's assets? It is a matter of profound shame that so much effort has been spent to secure simple justice. In a democracy it is humiliating that any considerable number of men who depend on the voters for their position, who are eager to follow their behests in order that they may be reelected, a part of whose capital is the astuteness with which they read the sentiment of their constituency, it is indeed humiliating that so much energy was spent before they could be convinced that the people were aroused. Had they thought the demand deep seated and wide spread they would have passed the laws without delay, and we would have had a parcels-post and other needed reforms. They thought the cry was of the faithful few, who in each generation have called a people to act intelligently and honorably. Their hesitation is the most scathing criticism. It is a mirror in which we can read the record of our lives. The reflection may not be flattering, but it should be instructive. It is absurd to say that a man who depends on the good-will of the people will voluntarily go against their wishes. He wants votes and wants them bad. His official acts will comport with what he believes will get them. If he mistakes in his estimate he loses. His voice and vote in Congress is a pretty safe index of his estimate of his constituency.

Instead of boasting of the achievements of the last Congress let there be a sincere soul-searching on the part of those who alone are responsible, the voters. They will get what they want. It is folly to say the members go to Washington and do as they please. Their return to Washington depends on doing as the voters please. The same rests with the people.

Ohio State Fair

Preparations are being made to continue the excellent record the state fair achieved under the splendid management of Hon. W. W. Miller. Splendid entertainment is being provided. It is an education to visit a great fair like

The Grange

this and see the march of events as marked by human industry and ingenuity. No one can afford to miss going at least once in two years. The experiment station will have even a better exhibit than ever before. It is being carefully planned, and experienced men will be in charge to explain the exhibits and answer questions.

The college of agriculture and domestic science will likewise make an exhibit of value to every farmer.

The traveling library, under the direction of Mrs. Galbraith, attracted great attention last year, and will again this.

The grange reunion will be held Wednesday and Thursday. The educational work will have a place on the program, and also an exhibit in charge of the superintendent.

Fine races, varied entertainment of a popular sort, grounds free from fakirs, and exhibits that would credit a great national exposition makes Ohio State Fair the greatest in the country. Let the people patronize it.

Secretary Calvert is sparing no effort to keep the fair up to this high grade, and to add to its attractions and value. He says that it promises to be the greatest in its history.

The Woman's Corner

It is often said that were it not for women the grange would long since have passed the way of other meritorious organizations. The same is said of the church. If she is so important a factor, why not have a corner of her own? Sisters, this is your's, and I wish you would fill it each issue. Let us work together to be more helpful to ourselves. Will you help?

Nearly every state in the Union has institutes for men. Two or three have provided for women. If the women want institutes, if they desire topics of

Have the farmers' institutes aided agriculture? Is the life of an individual of as much worth as that of live stock. Do you know all you care to about the business and art of home-making? Work for women's institutes.

Just as long as women work twelve to sixteen hours a day, they will not be in mental trim to cope with conditions that have brought this to pass.

As long as there is more attention given to the curve in a pattern than to the curve in the rise and fall of the labor market, just so long must she accept lower wages than men for the same amount of effort. Manufacturers and merchants are eager that she attend to the pattern curve. That makes trade and perpetuates it.

The grange has passed resolutions at each session favoring woman suffrage. With all its power and influence it is strange that no state has yet cooperated with other organized agencies to secure this justice.

None do more to keep up the grange than the women, yet there is not a state that has a woman member on the executive committee. The executive committee is the state grange between sessions, and is entrusted with all the important duties.

Women have a vote. Let them secure this needed reform. Women are producers on the farm. Let them be in shape to look after their interests. Direct management is always more effective than indirect.

With all our boasted gallantry it is truly a sublime spectacle to see a woman worn with the business of caring for a home compelled to spend hours in patching while others are resting or visiting. If the condition was not curable, then the noble part would be to make it as beautiful and bearable as possible, but it is curable. When women realize that

ment part in the councils of his church, has served as secretary for several years and has issued a comprehensive secretary's record book. He has also devised labor and time saving blanks for the secretary and treasurer of the subordinate and Pomona granges which have simplified the duties of these important and overworked officers. He has taken great interest in educational matters and has served as member of his school board for many years. He is a good speaker. State Master Derthick has invited him to address picnics this summer.

A Visit to Warren County, Ohio

It was a pleasure to visit the grange where the widow and daughter of the father of the grange in Ohio, Hon. S. H. Ellis, have their membership. It is a splendid organization of about one hundred and fifty members, and an average attendance of about two thirds the membership. Each year a number visit the state grange and contribute by their presence to the helpfulness of the meetings.

I was a guest at the home of Mrs. Ellis. It is rich indeed with mementoes of the past. Mrs. Ellis and daughter are the only survivors of the first state grange held at Xenia in 1874. In their home the first instructions were given, in their county the first grange was organized. Mrs. Ellis was the first Ceres of Ohio State Grange. Miss Ellis is Flora of state grange, and by her queenly, gracious presence, her grasp of grange affairs, makes one of the most valuable officers. She probably possesses a larger store of grange history in Ohio than any other. Perhaps she will tell us of it some day.

It was a delight to see the ceremonies of opening and closing exemplified so carefully. It is well worth the labor of years to bring a grange to the high efficiency of this one. The lecturer, F. A. Hartsock, prepares interesting programs. He is producing a fine grade of honey, which is packed in attractive cartons, and which brings a high price in the market. The same painstaking care is shown in grange work that brings success in his financial enterprises. The Master, Warren Keys, well known to grange workers, is a young man of promise, and carries well the honors of his office. Withal it is a splendid grange, big with promise for future good, and will send workers into the field to carry on that which their honored member, Brother Ellis, so nobly began. I went to explain the educational work, and I carried away hope and inspiration.

Make Your Grange Do Something

Make your grange mean something to your community and you will not need to seek members. People like to be identified with agencies that do things. The desire to do anything that is beneficial is the divine instinct in man. Respond to it, and all good will come. Deny it fruition, and disaster results.

*Mary E. Lee*

Why Join the Grange?

The following are some of the reasons why a farmer should belong to the grange:

- 1. It is the only farmers' organization.
- 1. It is controlled by the farmer and his family.
- 2. It is the only organization that does not look for the wealthy to fill its ranks.

It is for the farmer. It educates him in agricultural branches.

It educates all its members by literature pertaining to agriculture.

It has agricultural discussions at its meetings.

It favors the teachings of the principles of agriculture in the rural schools.

- 3. It causes legislation favoring the farmer.

The oleomargarin law.

The Rural Free Delivery.

- 4. It fights all schemes laying unnecessary tax on a few people.
- 5. It maintains an insurance which is one of the safest and cheapest in existence.

6. It favors the merit system and the abolition of the spoils system.

It is by the farmer. Being the only farmers' organization, being for the farmer and by him, the grange should receive the hearty support of every progressive farmer.—Anna Lottie Chase, in New York Grange Bulletin.



JOHN V. TUSSING

interest to the home-maker discussed, let them work earnestly for it. This space is open for your views.

The National Association of Farmers' Institute Workers has appointed a standing committee of three to devise means for extending women's institutes. Miss S. Blanche Maddock, Guelph, Canada, Mrs. S. Noble King, Bloomington, Illinois, and Mrs. Mary E. Lee, Westerville, Ohio, are members of this committee.

Each one of us will be glad to have you write personal letters to this column. Do you believe in institutes?

they are economic factors, and their labor is controlled in the home as well as in other industries by the same laws that control other labor, they will find the cure.

John V. Tussing

It is a pleasure to present the photo of one of the new and active workers in the grange, John V. Tussing. He has served as Master of his own grange since its organization, and of Fairfield County Pomona. He makes a good presiding officer. He has taken a prom-



HALF-BREED JOE'S daughter was not listening, but as she passed the open shutter she heard a few detached words, and they were enough. Taking her rifle from its pegs, she slipped in a fresh cartridge and went quietly from the cabin, leaving her father and his beady-eyed partner talking earnestly as they sat upon the bench behind the cabin.

Joe was not an agriculturist or clearer of land, and the unbroken forest crowded so close as to lend two of its trees to the upholding of the home as corner-posts, their untrimmed branches spreading about and over it in effectual screening. The cabin was like a rough-sticked hawk's nest, but clinging to the base of the tree instead of its top. Two days' journey to the south was a trading post, with its stockade and storehouses; to the north was forest. The girl turned to the north and in a few minutes had disappeared among the trees.

Three days she journeyed, steadily, untiringly, the Saxon blood showing in her eager eyes and the Indian in her endurance and fearlessness. At night she slept on the leaves, wherever darkness overtook her, unmindful of solitude or prowling animals, and when hungry there was always something in reach of her rifle, and her hands were deft and quick in its preparation. As the third twilight was thickening into darkness, she came to a ridge overlooking a broad valley, with water glimmering in the distance. It was the end of her journey, a region prolific in fur game, and she waited on the ridge with her eyes searching the valley as the night thickened, until at last the bright twinkle of a camp-fire suddenly shot toward her from the far side of the lake, miles away. Then she sped on. Every year, in season, the trading post sent men in all directions, and of this valley the factor's son himself was in charge.

They were sitting about the camp-fire, eating the supper which their cook had just distributed, when she appeared noiselessly from the darkness. The men sprang to their feet, instinctively grasping their rifles. Then the weapons were lowered, and Henri Lavand, the factor's son, sprang toward her, his face radiant, his arms extended.

"Aline," he cried joyously, "you have relented at last and come to me. We shall now be—"

But her hand was upraised, her face pale.

"Stop!" she ordered, "there is no time to waste in words. My father and the chief will be here soon. I heard them talking. They only go to the camp for the chief's men, and then will come straight here. I have been swift, but they will be swift, too. It is known that you have many pelts. They will surprise you and take them, and if you resist in the least, they will—"

"Bah!" contemptuously, "they will not dare. We have too many men scattered through the country."

"They will dare," sternly, "I know my father and I know the chief. My father says that as agent for the great company you have tried to drive him from woods that are free to all, and now he will drive you away or kill you and be revenged. There are but six here and they will be twenty. And you know how the chief hates you."

"Yes," smilingly, "I know, and why. But the trading post is only five days' journey, with a hundred men. Your father and the chief are not fools, you must remember that."

"They hate you and can bring twenty to your six," she repeated impatiently. "And they are as good fighters as you, and as strong, I know. My father says he has laughed at the trading post's hunters before, and can do it again. It is a big country, and he and the chief know it better than you. Be wise in time and hide yourselves and the furs. They will be here soon."

Henri looked at her sharply, his smile vanishing. The girl's earnestness carried with it conviction, and she had come nearly a hundred miles to warn him. His gaze became more grave.

"Yes, I know," he said thoughtfully, "they are good fighters, and though we do not mind odds, perhaps twenty to six, and from ambush—" He turned suddenly to his comrades.

"Men," he said, his voice dropping a little instead of rising, "you may take your longest-range rifles and twenty-five cartridges. We will go to the ledge on top of the ridge and wait for them there. It will be moonlight in an hour, and we can see them for some distance. We will be able to pick off half their number before they get our range, and can then manage the others. If they arrive sooner we will ambush them on the way, as they intend to us, and make the result the same. Aline, you—"

"I shall go back to my people," the girl interrupted coldly, "to warn them."

## A Daughter of the Forest

BY FRANK H. SWEET

"What!" in astonishment, "after coming here to warn us?"

I came to save your lives and the season's work, not to start you on the warpath. You speak of ambushing my people, so I must go now and give them warning."

"But they will kill you, girl," hoarsely. "You know the chief and his influence over your father. After this act their one thought will be revenge, and it will fall on you."

The girl retreated a few steps toward the forest darkness.

"I am not afraid," she said calmly. "My father is my father, and I shall not let him come to harm."

"He means for you to marry that viper, the chief," desperately. "If they do not punish you in any other way, they will force you to that at once. It would be worse than death, Aline, a white girl like you in the power of the most despicable Indian that ever lived."

"I am Indian, too," proudly.

"But not like the others. Oh, Aline!" for she had turned suddenly and disappeared in the darkness of the night. He sprang forward.

this and his powerlessness to avert the fate which threatened her, he groaned aloud. There was but one thing he could do. He turned suddenly, his voice ringing sharp in its agony.

"Men," he cried, "you will take all the furs you can and carry them to the big bateau. Four trips will be sufficient. Then pole the bateau to the little island in the lake. We can hold that against almost any number of assailants. Leave all your rifles except the Winchesters. I will remain here and watch, and will look out for the others. Hurry!"

"But why not go back to the ridge, Henri, as you first planned?" expostulated one of the men. "There are six of us, and we are not afraid. With the chief and his renegades out of the way, the air will be easier to breathe. It will be worth the fight."

"No, no," said Henri sternly. "You all heard, and it is no longer a secret. I would give my life to please that girl, and she does not want her father or kinfolk harmed. If you like me, bear with me in this."

Without a word the men turned to the bales of furs. But as the last one stag-



"I came to save your lives and the season's work, not to start you on the warpath"

"You shall not go," he cried wildly. "Oh, Aline, don't you suppose I understand what this coming to warn us means? It is the answer I have been seeking for a year, and you would not give. You do love me, sweetheart, and you shall never go away from me any more. There is a priest down at the trading post, and we will go straight there and be married. Aline! Aline!"

He waited a moment, then: "Aline, do you hear me, sweetheart? I will do everything you wish. We will not harm your father or the Indians. We will take the furs away and hide them, as you say, and will conceal ourselves. Only come back. Aline, come back!"

But there was only silence. Her moccasined feet were too light to send back a sound of the course taken. For a moment he felt a wild impulse to follow, to set his men to scouring the woods; but he did not yield. Aline knew the forest better than any of them, and she was as fleet. In the darkness it would be impossible to find her. Moreover, she never could be brought to him by force. As he realized

gered toward the lake under his burden he glanced back.

"You should not remain here, Henri," he warned. "It may mean your life. At least go with us to the boat, and when the furs are removed we will come back and watch with you."

"I wish to watch alone, Marcel, and have my reasons. Now hurry."

In ten minutes they were back for another load. Before the hour was up Henri could hear the low ripple of the bateau as it was being pushed into the water, and then the soft dip of the poles. The bateau was on its way to the island.

But he had not been idle. With the disappearance of the first load he had commenced gathering up the rifles and carrying them to the dense mass of broad-leaved laurels which they had selected as a windbreak for the camp. In the flickering light of the fire the laurels looked like a solid wall which wavered backward and forward.

Henri worked swiftly but methodically. Each man had several rifles, for large and small game, and all these were car-

ried into the thicket. Then he gathered up an armful of straight sticks, about the size and length of a rifle barrel, and carried them into the thicket also. By the time the bateau poled from shore his work was finished. Then he threw more fuel upon the fire, so that when it flared up the light should fall clearly upon the laurels.

That done, he threw himself upon the ground with his feet to the fire and anxiously waited.

It was not long, and he was conscious of the stealthy forms as they slipped from the darkness and surrounded him. But he made no effort to rise until the exultant voice of Half-breed Joe hissed in his ear:

"Caught at last, Henri Lavand. Now git up."

Henri did so slowly.

"What do you want," he demanded.

Half-breed Joe chuckled viciously. "Heap," he answered. "Fust we take your furs, then we carry you two, t'ree days north an' take away all your guns an' t'ings an' let you go. Maybe you git to coast an' be save, but most likely not. I been promis kill you many time, but this be more fun. Now where t'udder men—out huntin'? We wait here an' trap when they come back."

"A cleverly arranged plan," commented Henri. He stepped a little closer to the fire and gave it a vigorous kick, which sent the flames shooting upward. "But unfortunately for you we were prepared. See!"

He threw his arm toward the wall of laurels, where, in the strong light, their blanching faces saw a long line of rifles covering them, a dozen, twenty, forty—they could not tell how many, for the motionless, implacable barrels extended entirely along the wall and back into the semi-obscurity.

"The—the trading-post men," faltered Joe. "How they come here? I thought you only six."

"We had warning in time," easily, "and were prepared."

"What you do with us?" sullenly.

"Why, just pull your teeth a little, I think," smilingly. "You know I want to marry your daughter, Aline, and for her sake I shall let you go, you and the chief and all his men. But for precautionary reasons you must leave your weapons here, guns, knives, hatchets—everything. I shall not confiscate the firearms, but will leave them at the big rock two thirds of the way from here to the trading post. You may send some of your men there one week from to-day. Now," his voice suddenly becoming stern, and his hand rising significantly toward the thicket, "you may as well drop the weapons at once. Quick!"

They did so, scowling but hurriedly. With that line of rifles covering them they could do nothing less. But Joe's face had grown dark.

"So it my girl who warn you," he hissed.

"I goin' make her suffer for it. I—"

"You will do nothing of the kind, Joe," sternly. "If you punish Aline in any way I shall hear of it, and—"

"Huh! I no punish myself," vindictively. "Soon's we catch I give to chief. He her master then, an' know how fix 'bout this all right."

Henri took a quick step nearer.

"Listen to me, Joe," he warned, his voice low, but cutting like a knife. "You see the number of men I have ambushed here, and you know I make no promises I cannot fulfil. Now if you or the chief lay so much as a hand upon Aline, if you offer her to him, or even do not protect her in case he seeks her, I will hunt you both from the big river to the ocean, and the punishment will be something for the whole country to remember. Now go, and remember what I have told you."

They shrank away with furtive, baleful glances, but cowed by the line of rifles. As the last one disappeared in the darkness the sternness left his face. What would their temporary fear amount to when back in the fastnesses of the great forest? Once in their clutches, what would Aline's fate be? It was not conjecture but certainty, and he groaned again. It was horrible to think of. He must do something to forestall any harm to the girl, and do it quickly.

He did not hear the swift approach of light, moccasined feet, and was only aroused by the soft touch on his arm. Aline was at his side, but not the Aline he had known. This one did not hold her head scornfully erect and regard him coldly. Instead, she was leaning forward a little, and in her eyes was an unfathomable gladness, and trust and love.

"Henri," she whispered happily, "I only went a few steps into the forest, and have heard everything. You are brave and tender and true—all that a woman could ask. I did not know that there was a man who would do so much for love of me. Now I am ready to go with you to the priest at the trading post."



"I AM ready to die. When my country takes her place among the nations of the earth, then, and not till then, let my epitaph be written. I have done."

Among the Irish people of the world the memory of the martyred hero, Robert Emmet, stands forth in bold relief. His passionate love for all Irish ideals stamped him indelibly upon the memory of his countrymen. The pathetic figure of this boy, only twenty-five years old when he was executed, a symbol of sacrifice for the freedom of their native country, has ever remained in the vision of all sons and daughters of the Emerald Isle. The date of Robert Emmet's birth is given as March 4, 1778, in Dublin, Ireland. He was the son of Dr. Robert Emmet, a famous physician.

It is not known that the subject of our sketch had any active connection in the uprising of the United Irishmen in 1798, but it is a known fact that he was frequently present at the meetings, many of which were held at his brother's house. Thomas Addis Emmet was arrested that year, but was soon afterward released, and then went to New York, where he founded the family of the American Emmets, and became a prominent lawyer. It is narrated that the arrest of his brother Thomas seemingly drew Robert Emmet closer in the inner circles of the secret body of the United Irishmen. In April, 1798, he resigned from Trinity College and went to the continent of Europe, settling down in Paris. It was his intention to join his brother in America, but in October, 1802, he returned from Paris to Ireland, where within two months from the date of his arrival, he became known as the leader of the most irreconcilable faction in Dublin. His zeal for the Irish cause was not at all tempered with discretion, and as the organization with which he connected himself was honey-combed with spies of the British Government, Emmet was soon a marked man with a price on his head. On July 18, 1803, there was an explosion of gunpowder in a depot in Patrick Street, Dublin. The explosion was supposed to have been caused by the United Irishmen, but more generally believed that it was caused by the agencies of the British Government itself. At this time Emmet was planning to wait for the expected invasion of England by the French, but at the same time he was preparing an attempt to attack Dublin Castle by surprise. This attempt came to a head on July 23d, but as soon as the enterprise was well under way it became evident that the government was fully prepared for the revolutionists, the gateway of the castle having been left open and unguarded. Throughout Emmet's years of connection with the Irish uprising his plans were invariably defeated by British spies within his own organization. It is said that the attorney who defended Emmet during his trial, Leonard McNally, was in the pay of the British Government during the whole of the trial, as he had been for years before. Describing the scene when the sentence of death was passed upon Emmet, a historian says that McNally threw his arms about Emmet's neck and kissed his cheek with apparent sympathy, and yet it is now known from the secret service money expenditures of the government, which were made public several years ago, that on that very day McNally was secretly paid two thousand pounds by the British Government for the services rendered. He was also in receipt of a secret pension until his death in 1820. Emmet's trial was a great trial. His speech was greater.

"My lords, as to why judgment of death and execution should not be passed upon me according to law, I have nothing to say, but as to why my character should not be relieved from the imputations and calumnies thrown out against it I have much to say. I do not imagine that your lordships will give credit to what I am going to utter; I have no hopes that I can anchor my character in the breast of the court. I only wish your lordships may suffer it to float down your memory until it has found some more hospitable harbor to shelter it from the storms with which it is at present buffeted. Were I to suffer only death after being adjudged guilty I would bow in silence to the fate which awaits me.

"But the sentence of the law which delivers over my body to the executioner consigns my character to obloquy. A man in my situation has not only to encounter the difficulties of fortune, but also the difficulties of prejudice. Whilst the man dies, his memory lives, and that mine may not forfeit all claims to the respect of my countrymen I seize upon this opportunity to vindicate myself from some of the charges alleged against me.

"I am charged with being an emissary of France. It is false—I am no emissary. I did not wish to deliver up my country to a foreign power, and least of all to France. Small, indeed, would be our claims to patriotism and to sense, and palpable our

## The Memorable Trial of Robert Emmet

affectation of the love of liberty, if we were to sell our country to a people who are not only slaves themselves, but the unprincipled and abandoned instruments of imposing slavery on others.

"When my spirit shall have joined those bands of martyred heroes who have shed their blood on the scaffold and in the field in defence of their country, this is my hope, that my memory and name may serve to animate those who survive me. If there be a true Irishman present let my last words cheer him in the hour of affliction."

Here Mr. Emmet was interrupted by Lord Norbury for the third or fourth time since he began his address. Turning directly to him, the prisoner went on:

"I have always understood it to be the duty of a judge when a prisoner has been convicted to pronounce the sentence of



ROBERT EMMET

the law. I have also understood that judges sometimes think it their duty to hear with patience and to speak with humanity—to exhort the victim of the laws, to accept with tender benignity his opinions of the motives by which he is actuated in the crime of which he is adjudged guilty. That a judge has thought it his duty so to have done I have no doubt, but where is the boasted freedom of your institutions, where is the vaunted impartiality, clemency and mildness of your courts of justice if an unfortunate prisoner, whom your policy, and not justice, is about to deliver into the hands of the executioner, is not suffered to explain his motives, sincerely and truly, and to vindicate the principles by which he was actuated?

"You, my lord, are a judge; I am the supposed culprit. I am a man; you are a man also. By a revolution of power we might change places, though we never could change character. If I stand at this bar and dare not vindicate my character, how dare you calumniate it? Does the sentence of death which your unhallowed policy inflicts on my body condemn my tongue to silence and my reputation to reproach? Your executioner may abridge the period of my existence, but while I exist I shall not forbear to vindicate my character and motives from your aspersions. And as a man to whom a good name is dearer than life, I will make the last use of that life in doing justice to that reputation which is to live after me, and which is the only legacy I can leave to those I honor and love, and for whom I am proud to perish. As men, my lord, we must appear on the Great Day at one common tribunal, and—"

In answer to the charge that he was the keystone of the conspiracy he said, standing and facing Lord Norbury:

"There are men concerned in this conspiracy who are not only superior to me, but even to your own conception of yourself, my lord; men before the splendor of whose genius and virtues I should bow with respectful deference, and who would not deign to call you friend—who would not disgrace themselves by shaking your blood-stained hand.

"Let no man dare, when I am dead, to charge me with dishonor. Let no man taint my memory by believing that I could have engaged in any cause but my country's liberty and independence. The proclamation of the provisional government speaks my views, and no inferences can be tortured from it to countenance barbarity

or debasement. I would not have submitted to foreign oppression for the same reason that I would have resisted tyranny at home."

Here Lord Norbury began another address to the prisoner, and authoritative history tells us that Emmet stood under it at his full height and looked with scorn on the judge as he spoke. Lord Norbury said:

"Mr. Emmet, you have been called upon to show cause, if you have any, why the judgment of the law should not be enforced against you. Instead of showing anything in point of law why judgment should not pass, you have proceeded in a manner the most unbecoming a person in your situation. You have vowed and endeavored to vindicate principles totally subversive of the government, totally subversive of the tranquility, well-being and happiness of that country which gave you birth, and you have broached the most abominable treason.

"You, sir, have the honor to be a gentleman by birth, and your father filled a respectable situation under the government. You had an elder brother whom death snatched away and who, when living, was one of the greatest ornaments of the bar. The laws of this country were the study of his youth, and the study of his mature life was to cultivate and support them. He left you a proud example to follow, and if he had lived he would have given your talents the same virtuous direction as his own and have taught you to admire and preserve that constitution for the destruction of which you have conspired with the most profligate and abandoned, and associated yourself with hostlers, bakers, butchers and such persons whom you invited to counsel when you erected your provisional government."

Then came the great and never-to-be-forgotten exhortation. Emmet stood forth from the railings of the 'prisoners' box with the full understanding that his fate was drawing very closely about him.

Referring first to Lord Norbury's latest remark, he said:

"If the spirits of the illustrious dead participate in the concerns of those who were dear to them in this transitory scene, dear shade of my venerated father, look down on your suffering son and see if he has, for one moment, deviated from those moral and patriotic principles which you so early instilled into his youthful mind, and for which he is now to offer up his life."

And then, concluding in a voice which, though weak from emotion and weariness of body, filled every corner of the courtroom, he said:

"My lord, you are impatient for the sacrifice. The blood which you seek is not congealed by the artificial terrors which surround your victim. It circulates warmly and unruffled through its channels, and in a little time it will cry to heaven. Be yet patient. I have but a few words more to say; my ministry is now ended. I am going to my cold and silent grave; my lamp of life is nearly extinguished. I have parted with everything that was dear to me in this life for my country's cause, and abandoned another idol I adored in my heart—the object of my affections.

"My race is run—the grave opens to receive me and I sink into its bosom. I am ready to die. I have not been allowed to vindicate my character. I have but one request to ask at my departure from this world—it is the charity of its silence. Let no man write my epitaph, for as no man who knows my motives dares now vindicate them, let not prejudice or ignorance asperse them. Let them rest in obscurity and peace, my memory be left in oblivion and my tomb remain un-inscribed until other times and other men can do justice to my character. When my country takes her place among the nations of the earth, then, and not till then, let my epitaph be written. I have done."

Lord Norbury's insistent interruption of Emmet was said to be but a part of the deep-laid plot to cause Emmet to lose the thread of his argument and prevent him from publicly exposing the true condition of the country and the reasons for the uprising. Lord Norbury's zeal as a judge led him into terrible travesties on justice. Of ninety-nine men brought before him during the circuit in which Emmet was tried he condemned ninety-seven of them to death. The sentence of death upon Emmet was pronounced at half-past ten o'clock at night. The prisoner had been in the box continually from early morning.

At an early hour the next day, Decem-

ber 20, 1803, Robert Emmet was hanged in Thomas Street, Dublin, and after the execution his head was severed from his body. After the execution the body was taken to Pottersfield at Dublin, but it is known that he was not buried there, but the body was put aside where it could be easily reached, in case it were ever claimed. Rev. Thomas Gamble, of Dublin, took away the body that night, but what he did with it has never been ascertained. Doctor Petrie made a cast of the head that evening and is said to have kept the gruesome relic and passed it to some unknown family that Petrie numbered among his friends.

Treating the subject last year upon the occasion of the anniversary of the birthday of the Irish patriot, the Chicago "Record-Herald" reminds us that the most superficial account of Robert Emmet's career would be incomplete without reference to Miss Sarah Curran, a sister of Richard Curran, for whose sake Emmet braved his arrest and received his subsequent condemnation.

Emmet's letters to Richard Curran, during the week preceding his execution, are full of pathos. In one of them—the last—he reiterates his love for the sister and ends up by saying: "It was not thus I thought to have requited her affection. I did hope to be a prop round which her affections might have clung and which would never have been shaken, but a rude blast has snapped all that and her fondness falls over a grave. This is no time for affliction. I have had public motives to sustain my mind and I have not suffered it to sink, but there have been moments in my imprisonment when my mind was so bathed in grief on her account that death would have been a refuge. God bless you both, my dearest Richard. I am obliged to leave off immediately."

Soon after Emmet's death Sarah Curran left her father's house, driven forth penniless and an outcast, depending upon a few friends in Cork for shelter. While there she met a former acquaintance, Capt. Henry Sturgeon, of the British army, whom she had known and highly esteemed for years. Captain Sturgeon persisted in his offers of marriage, and at length was accepted, but Miss Curran told him frankly that in her destitute condition she found it necessary to obtain a home and a good man to protect her, and that her heart was in the grave with Emmet. They were married and Captain Sturgeon at once took her to a milder climate, in the hope of restoring her health, but she gradually passed away, dying four years afterward. Her body was eventually taken back to Ireland, but to this day her grave is unmarked and as unknown as that of her lover.

### A Recollection

(With Apologies to an Old Favorite)

I remember, I remember the flat where I was born,  
The little window where the sun came peeping in at morn;  
Until the maid-of-all-work pulled down the window-shade  
And shut out all the sunshine for fear the rug would fade.

I remember, I remember the gas-lamp in the hall  
That sometimes burned till twelve o'clock and sometimes not at all;  
'Twas just a little flicker in all that waste of gloom,  
Like someone with a candle illuminating Doom.

I remember, I remember that things both great and small  
Were made to fold up into some recess in the wall;  
The bathtub was in sections, and when the bath was o'er  
It folded up and fitted a panel in the door.

I remember, I remember the meters everywhere,  
A meter for the sunshine, a meter for the air,  
For heat and gas and water, in every sink and tub,  
We had the metric system for everything but grub.

I remember, I remember the furniture we had,  
A grand piano that became a folding-bed for Dad;  
The sofa was a clothes-press, the davenport a trunk,  
The hall clock was a swindle that collapsed into a bunk.

I remember, I remember I sat on Mother's knee,  
There was no nook or cranny that she could find for me;  
And also I remember we moved soon after that—  
Our landlord would not let us have children in the flat.

—New York Times.



## Root in the South

SECRETARY OF STATE, ELIHU ROOT, is on an important mission to the South American republics. His first purpose was to attend the Pan-American Congress, which met in Rio Janeiro on July 21st, but in reality his journey has for its object the establishment of more cordial relations between the United States and the countries to the south of us on this hemisphere.

The cruiser "Charleston" was fitted up in a most sumptuous manner for the comfort and convenience of the Secretary and his family on their long voyage. A new cooling apparatus and an ice-making machine were installed to abate the discomforts of the temperature in the tropics.

Mr. Root's itinerary is as follows: Leave Rio on August 6th, arriving at Montevideo on August 10th; leave Montevideo on August 13th, arriving at Buenos Ayres on August 14th; leave Buenos Ayres on August 19th, arriving at Valparaiso August 30th; leave Valparaiso September 4th, arriving at Callao September 9th; leave Callao September 15th, arriving at Panama September 22d; leave Panama September 25th, arriving in New York October 1st.

When the trip was first discussed it was rumored that Mr. Root expected to form a sort of an alliance between the governments of the western hemisphere in support of the Monroe Doctrine of the United States. It has been denied that he had any such specific object in view. Mr. Root's trip is said to be simply a friendly one, and that he hopes by personal contact with the administrative powers of these sister republics to bring about a better understanding between them and the United States, and possibly impress upon them that their interests are more allied with those of this government in a commercial as well as a political way than with any European nation.

It was the old idea of James G. Blaine, who believed that a great market for United States goods was being captured right under our noses in countries south of us which naturally ought to be our friends commercially as well as politically.

When Mr. Root became secretary of state this same idea of the extension of the market for United States goods to the south of us engaged his most earnest attention, and he urged our diplomatic and consular representatives in those countries to do all in their power to create more confidence in the United States Government and in United States goods. Special commissioners were sent to Central and South America to make close study of commercial conditions and to suggest methods by which the United States merchants could do business on the same favorable basis as those from Europe.

The matter was discussed time and again by Mr. Root and the President and was frequently taken up in cabinet meetings, until Mr. Root suggested that it might be a good thing if he were to attend the Pan-American Congress that meets in Rio Janeiro in July. At this congress he would be able to meet representatives from all the big governments south of the United States, and the mere exchange of friendly greetings would do much to bring about more confidential relations with the United States. President Roosevelt was enthusiastic about the idea and urged the Secretary to make the trip.

While the Secretary's mission is ostensibly for the purpose of cultivating closer relations between this and the other republics of the western hemisphere, and for the purpose of dispelling misconceptions of the attitude of the United States toward these countries, there is no doubt that he will also look closely into the political situation with reference to the maintenance of the Monroe Doctrine.

There has been a feeling in Washington that the commercial aggression of European countries, particularly of Germany, in South America, may lead to an attack on the principle so long maintained by the United States that no foreign power shall acquire any more territory on this hemisphere.

There have been apprehensions at times that Germany had her eyes fixed on South America as the most likely quarter of the globe in which to extend her possessions. There is no doubt that Secretary Root will make inquiries as to whether there is any ground for fear that Germany or Great Britain or France are laying any plans for the extension of their political as well as their commercial power in those countries.

No one understands the needs of our country along these lines better than Mr. Root, and no one is better able to handle the situation than he.



## Around the Fireside

## The Longworths in Europe

WHILE the reception to Mr. and Mrs. Nicholas Longworth in both England and Germany were expected to be warm and welcome ones, nevertheless it is gratifying to all Americans that they have exceeded what would have passed as an ample recognition of their official and social position. A good king, gracious and tactful, has received them with marked attention, although without any special regal pomp, and an emperor, celebrated for his skill, courage and energy, has treated our own "American princess" as one of the royal blood. There was a time some years ago when the people of the United States courted European favor. Things are different now, and they expect it as a matter of course.

## Washington as an Athlete

A WRITER in the "Philadelphia Record" has figured out that if Washington were alive to-day he would undoubtedly be a college boy, and if he went to college there is not a particle of doubt but that he would hustle for a place on the baseball and football teams. The writer has doped out that the great George was fond of all athletic sports and games, and states that it was very easy for him to maintain his supremacy in them. His natural constitution was good, and regular habits, supplemented by judicious training and exercising of his muscles, made him a foe with whom even the Indians hesitated to contend in athletic matches.

It is claimed that he could throw a stone across the Potomac, standing on the river bank at Mount Vernon.

His superiority in all outdoor sports stood him often in good stead, and when he was surveying land for Lord Fairfax in Virginia he won many friends among the redskins, among whom he was often forced to live, by taking part in all of their games.

One night he reached a little settlement of white people in the midst of a jumping match. Whoever jumped the furthest would win the hand of a wealthy farmer's daughter. The girl herself was present, so was the minister, all ready to

marry the maiden and the successful competitor. A young farmer named Jonathan had outdistanced the other young men who took part, and the girl seemed very well satisfied at the result.

At this point Washington asked if he, too, might be allowed to take part in the contest. Permission was given and he jumped three feet farther than any of the others had done.

The girl, not being blessed with the power of divination, did not guess that the successful young stripling was the future "Father of His Country," and her disappointment was plainly visible in her face. Washington finally relieved the situation by resigning his claims in favor of Jonathan. Then he stayed and partook of the wedding supper.

One cannot but wonder if the girl lived to know of Washington's ultimate greatness, and, if so, if she looked back with regret upon the result of the jumping match.

## Necessity for the Restraint of Anarchists

ATROCITIES committed during the past year by anarchists in Europe have again brought to public notice the importance of international agreement to bring about the suppression of the Red Terror. The bomb-thrower of Madrid was one Manuel (or Mateo) Morales, son of a rich manufacturer living near Barcelona, Spain, and his deed was prompted by anarchistic ideas acquired by recent association with German anarchists. While the sympathy of the civilized world has gone out to the Spanish throne, yet in London and other parts of the world anarchistic publications have been spread broadcast, defending the deed of Morales and expressing regret that the bomb did not destroy his intended victims. This attempt to murder, on the day of her wedding, an innocent girl who was a member of the British royal house, it is expected will influence the British government to see that hereafter London, which has heretofore been one of the centers for anarchistic plots, will assume the same attitude toward these plagues of society as that held by the continental European capitals. Mag-

azine writers declare it is high time for another international conference on anarchism. Americans think that should measures be taken between Great Britain and Switzerland for the expulsion of anarchists most of them would come to the United States where there are already too many. The English-speaking people are reluctant to interfere with political liberty, but as the "New York World" suggests, it becomes a serious question how far they are bound to exercise such restraint in dealing with those whose avowed object is to destroy all civilized society by force, and who regard good governments as worse than bad governments by the very fact of their being good. If the revolutionary anarchists of Europe and America make themselves an international menace they may be sure that society will protect itself.

## To Work at Night Instead of Day

THE great Frenchman, Prof. Flammarion, has hazarded the prediction that before the close of this century inhabitants of American cities will do their work by night and sleep by day, at least in the summer. He says light will become so inexpensive that darkness will be unknown. Commenting on the idea, the Pittsburg "Gazette Times," says:

Darkness is a foe against which civilization is constantly waging war. It facilitates crime, impedes travel, causes accidents, and handicaps human enterprise in nearly every department of activity. Darkness is to be conquered, and the great cities flooded with light so that midnight will be almost as bright as midday.

During the oppressive weather of the American summer, night is the best time for work. Refreshing breezes blow, and the absence of the sun's rays causes a lowering of the temperature. Instead of working in the coolest part of the whole twenty-four hours, most persons take their rest, and wait until the sun is blazing like a furnace in the sky before beginning their labors.

The professor's scheme would seem applicable only to the torrid season. With the coming of winter we should be compelled to revise our whole plan of living and return to day work. Such a radical change in habits twice a year would not be conducive to health.

The general adoption of night for work and of day for sleep would necessitate some changes in the language.

Nightmare would become "daymare," and we should have to shelve such phrases as "Black as night" and "Midnight roisterers." Men seen loitering about the streets as late as noonday would be run in as suspicious characters. Streets would be deserted at noon except for a few revelers and others returning from late after-theater suppers. Respectable folks would be asleep in bed. It is not expected, however, that Flammarion's idea will go into effect very soon, if ever.

## Increased Demand for the Bible

THE sale of the Bible, which has each year been large, has during the past year increased with great rapidity. Nearly 6,000,000 copies of the scriptures were circulated by the British and Foreign Bible Society during the year ending March last. This exceeded the Society's previous highest output by 33,000 copies. This large output seems the more remarkable, owing to the disturbed conditions which have prevailed in Russia, China and Japan, where some of the Society's heaviest sales take place.

The polyglot nature of the Bible Society's work is instanced in the fact that at Winnipeg, for example, the scriptures were supplied in forty-three different languages, while at Johannesburg versions in fifty-two languages were sold at the depot in that city, and a fifty-third was asked for by a newcomer, who demanded a Bible in Icelandic, which the agent had not in stock. During the past year eleven new languages have been added to the Society's list of versions.

## Love-Letter as a Will

A LOVE-LETTER, which Miss Florence M. Crawford declares is equivalent to a will and should give her possession of an estate valued at \$2,000 left by Edwin S. Updike, Jr., a paymaster's clerk in the United States army, and to whom she declares she was engaged, was produced recently before Charles Irwin, deputy register of wills, and was filed among other papers in the case.

The passage in the letter upon which Miss Crawford bases her claim reads:

"I and all that I have is yours to do with as you like. I am not in this half-hearted. I am wholly and absolutely yours, and I want to be."—Philadelphia Press.



THE OLD OAKEN BUCKET

Photo by A. J. Swanson



Printed Where You Used to Live  
 'Tisn't filled with cuts and pictures, nor the latest news despatches;  
 And the paper's often dampened, and the print is sometimes blurred.  
 There is only one edition, and the eye quite often catches  
 Traces of a missing letter, and at times a misspelled word.  
 No cablegrams nor "specials" anywhere the eye engages;  
 The make-up is, mayhap, a trifle crude and primitive.  
 But an atmosphere of home-life fills and permeates the pages  
 Of the little country paper, printed where you used to live.

How the heart grows soft and tender, while its columns you're perusing!  
 Every item is familiar, every name you know full well.  
 And a flood of recollection passes o'er you as you're musing  
 On the past, and weaves about you an imaginative spell.  
 You can see the old home village, once again in fancy, seeming  
 To be clasping hand of neighbor, and of friend and relative;  
 And their faces rise before you, as you're idly, fondly dreaming.  
 O'er the little country paper, printed where you used to live.

And you seem to leave the city, with its rush, and roar, and clamor,  
 With its busy, bustling atmosphere of turmoil and of strife;  
 Leave the multitude of surging, eager workers, and the glamour,  
 For the quiet, soothing blandishment of restful country life.  
 And you note a vine-clad cottage, with the roses nestling round it;  
 Hear the voice of mother calling for the long-gone fugitive,  
 While the echo of her pleading, memories repeat and sound it  
 Through the little country paper, printed where you used to live.

Every printed line reminds you of the days long since departed;  
 Here a boyhood chum is mentioned, there a schoolmate's name appears;  
 And the eye grows moist in reading, while the soul grows heavy-hearted  
 O'er the changes Time has wrought throughout the swiftly passing years.  
 Memory's scroll has deep impressions stamped upon its face forever  
 Of sweet pleasures which the busy city life can never give;  
 And, in fancy, you are roaming through the quiet town, whenever  
 You peruse the country paper, printed where you used to live.  
 —Sunset Magazine.

A Railroad Coach of Other Days

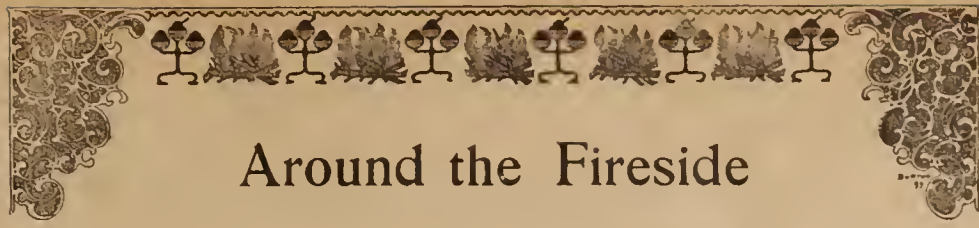
WE HAD not reached anything like our present degree of rapid transit when Sydney Smith wrote: "Man is become a bird, he can fly quicker and longer than a Solan goose. The mamma rushes sixty miles an hour to the aching finger of her conjugating and declining grammar-boy. The early Scotchman scratches himself in the morning mists of the North, and has a porridge in Piccadilly before the setting sun. The Puseyite priest, after a rush of one hundred miles, appears with his little volume of nonsense at the breakfast table of his bookseller. Everything is near, everything is immediate."

Part of this was imaginative on the part of Sydney Smith, for it is doubtful if people traveled at the rate of sixty miles an hour in his day. They travel at an even faster rate now, and everything is really near and immediate.

One hundred years ago it required four days to go from New York to Boston. Now they are considering the feasibility of doing it in four hours. People grow restless under the weariness of "dragging along" at the rate of but a mile a minute, and the "Thunderbolt" and "Flyer" and "Comct" express trains are urged to get along a little faster.

When George Stephenson proposed to build a railroad engine that would travel at the rate of twelve miles an hour, a periodical of the highest standing in London, the "Quarterly Review," said of the project: "Twelve miles an hour! As well trust oneself to be fired off on a Congreve rocket!"

We are given this amusing account of the first railways in our country: "There were no gates across turnpike roads, no brakes on the cars and no signal-lamps. One kind of a night signal used by an engineer for stopping a train was a burning tow-line kindled by a shovelful of red-hot cinders. A candle stuck in a station window was a signal to stop, and its absence meant 'go on.' The cars had no springs and no buffers, and the jolting was something awful. Not even Stephenson had passenger cars in mind when the railroad engine was first invented. The railroad was to be used simply for the purpose of carrying freight. Thomas Gray, of Nottingham, in England, was the first person to declare that the railroad could be used for carrying passengers, and the Edinburgh "Review"



Around the Fireside

called him a fool for suggesting such a thing, and even went so far as to say he should be put in a "straight-jacket." When Stephenson was before the House of Parliament for the purpose of being questioned regarding his proposed invention, one member of the committee said, with a sly wink intended for the rest of the committee,

"Well, sir, perhaps you could go at the rate of seventeen miles an hour."

"Yes, sir," said Stephenson quietly, although aware of the fact that he was being guyed.

"Perhaps some twenty miles might be reached?"

"I think so."

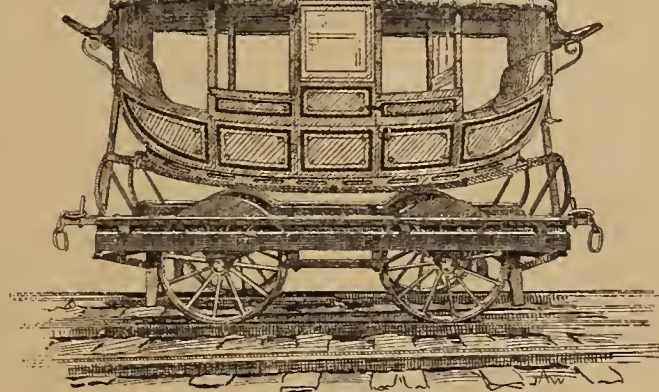
"Twenty-five, I daresay, you do not think impossible," with another sly wink at the committee.

"Certainly."

"Dangerous?"

"Not at all."

"Now tell me," was the final question



AN "OLD-TIMER"

asked in open scorn, "will you say that you can go thirty miles an hour?"

"I can," and the entire committee burst into jeering laughter.

It was declared by people of intelligence that the smoke from the engine would kill all the birds, and that no one could breathe riding at the rate of thirty miles an hour. It was even urged that the sight of a railroad engine would frighten all the game to death. The first railroad engine to turn a wheel in the United States was the "Stourbridge Lion." It was given this name because it was made at Stourbridge, in England, and it had a fierce lion painted on its front. It was taken to Honesdale, in Pennsylvania, to be tested on a line of track there, and so intense was the interest in it that the entire population for miles around assembled to witness the test. The fact that the engine was to attempt the awful feat of crossing the Lackawanna River on a trestle a hundred feet high added something akin to terror to the situation. Wagers were freely made that the engine and bridge would fetch up in the bottom of the river.

The first passenger cars were modeled somewhat after the stage-coaches of that period, and cars looking very much like stage-coaches were in use a good many years after the first railroads were built.

It is a far cry from Peter Cooper's little "Tom Thumb" engine, the first locomotive built in the United States, to the great two-hundred-and-forty-ton engines of our day. The "Tom Thumb" weighed but a ton. And it is another far cry from the first passenger coaches to the elegantly appointed "Pullman" of our times, and yet we feel that there is something lacking still in the most perfect of our modern "sleepers," particularly when it comes to a man of six feet three and weighing two hundred and thirty pounds attempting to stow himself away in an "upper berth." We are a progressive people and we will be doing things better than we do now, even if we have gotten miles away from the primitive methods of travel adopted by our forebears when they went a-junketing.

The Four-Handed Family

WE OF to-day only claim relationship with the monkey, but the early Egyptians went so far as to worship the animal. Both these facts, says "People's Magazine," are evidence of the importance of the monkey in the realm of nature, and are sufficient excuse for making more familiar acquaintance with it. There are a great many different sorts

of monkeys, ranging in size from a little fellow able to sit in our hand to a monster of greater proportions than man, and having a disagreeable and exaggerated likeness to him. Most interesting centers in the greater monkey, or manlike ape, as he is called. The best type of manlike ape is the gorilla. What a horrible beast he is!

As for strength, the gorilla has an abundance. It makes nothing of taking a gun and bending it double, and of course, the strongest man is like putty in its hand. One quick blow of the fearful hand, and life goes out like a candle-flame in a hurricane. The gorilla is not courageous unless cornered, very fortunately, and therefore it does not do a great deal of harm in the way of taking human life, though it does destroy fruit and grain in a wholesale manner. The orang-utan is found only in the islands of Borneo and Sumatra and is not quite as large as the gorilla, nor is it as ugly

looking, though more repulsive. The chimpanzee, like the gorilla, is found only in Africa. It is smaller than either of its relatives, but more intelligent and more docile. It has frequently been tamed, and adapts itself to the ways of civilization. Two African apes have been accredited with kidnapping negro women and keeping them in captivity, but there is no reliable truth of this, and therefore is not worthy of belief. The peculiarity of the apes is that they have no tails.

After the manlike monkeys, or apes, which stand more or less erect, come the doglike monkeys. These differ from the apes in having the hind limbs longer than the fore limbs, and in usually having tails. There are two kinds of doglike monkeys. One has pouches in the cheeks, in which it can stow away considerable food, and the other has a stomach to carry and hold more food.

The baboons belong to the cheek-pouch kind, and are the most interesting of the monkey family, from the fact of combining great intelligence with strength and courage. It was one of the baboons which the Egyptians worshiped under the name of Shoth. They are quite easily tamed, and frequently are made household pets, but they can be, when wild, dreadful enemies. They live on the rocks in great bands, and seem to have a regular organization. When they go out for plunder they have sentinels, advance and rear guards.

All of these monkeys belong to the Old World. In America is found an altogether different character of monkey. It has no cheek-pouches, but its greatest peculiarity lies in the possession of a tail which answers almost the purpose of a hand, being able to grasp a limb with as much certainty and strength as a hand. None of the monkeys of the Old World have such a tail. Nor have all the monkeys of the New World, but very many of them have. The South American monkeys are the ones best known in this country, partly because most easy to obtain, and partly because they are easily made pets.

Little Science Stories

THE ELECTRIC LIGHT

WHILE experiments with electricity were many and varied during the eighteenth century, the very earliest instance of applying it to the production of light was in 1810. Sir Humphry Davy, an English scientist who devoted himself to the subject, found that when the points of two carbon rods, whose other ends were connected by wires with a powerful primary battery, were brought into contact and then drawn a little way apart, the electric current leaped across the intervening gap, forming an arc of light, which is now known as the electric arc.

This discovery of Davy's resulted in giving to the world the brilliant arc-light now in every-night use in every city throughout the country. Following his discovery, other inventors set to work with the hope of perfecting a device for automatically regulating the position of the two carbons.

Staite, as early as 1847, patented a pe-

culiar lamp, in which the carbon rods were fed together by clock-work mechanism. Devices of a similar nature were patented by Foucault and others, but the first really successful arc-lamp was produced by Serrin in 1857. The main features of Serrin's lamp have been employed in those of the present day.

Bringing the new illuminant to a practical plane required many years of laborious experiment and improvement; but the inventions of Jablochhoff, Brush and others did much to make it adaptable for economical lighting purposes, and resulted in the adoption of the arc-lamp for lighting large rooms, stores and streets.

While the arc-light was being brought to a state of perfection, the incandescent light was coming in for its share of attention. Inventors, realizing that while the arc-light could be easily adapted for use in buildings and large areas, it was still too expensive for use in residences, set their wits to work to produce a smaller light that would serve the purpose of private lighting.

In 1847 the first strictly incandescent light was invented by Frederick de Molyns, of Cheltenham, England. The principle upon which it was constructed was the same as that of the incandescence produced by the high resistance of a platinum wire to the passage of an electric current. Alloys of iridium and platinum, and iridium and carbon, were used for the same purpose by Petrie in 1849.

By the aid of the philanthropist, Peabody, an incandescent lamp was perfected by an American named Starr, and King, his English associate. Starr made use of carbon alone. Still, although great progress had been made, the incandescent light was not a practical success, it remaining for the invention and introduction of the dynamo to bring about the desired result.

Thomas A. Edison, "the wizard of electricity," and Sawyer and Man, of New York, were among the first to make incandescent lighting an assured success. For a number of years Edison experimented with platinum, making use of fine wire coiled into a spiral, in order to concentrate the electric heat and produce incandescence.

The results from the use of platinum were not satisfactory, and Edison, with that perseverance which has accomplished so much, turned his attention to carbon instead. The superiority of carbon as an incandescent illuminant had already been demonstrated, but the rapidity with which it was consumed made it impracticable as compared with the durability of platinum and iridium.

The problem which Edison had set about to solve was to secure the greatest possible illumination of the carbon with the least consumption. The consumption, he reasoned clearly, was due to oxidation, and it was a question whether the same illumination could be obtained if the carbon were enclosed in a glass globe.

The greatest difficulty was to obtain a sufficiently perfect vacuum, and maintain it in a hermetically sealed globe enclosing the carbon, maintaining at the same time electrical connection with the generator and expansion different from that of the metal conductor leading into it.

Sawyer and Man attempted to solve the problem by filling the globe with nitrogen in an effort to prevent combustion by eliminating the oxygen, but the results obtained by this method were far from satisfactory. Edison gave his preference to the vacuum idea, and labored to overcome the difficulties which it presented.

The invention of the mercurial air-pump about this time solved the problem by making it possible to secure a sufficiently perfect vacuum. The difficulty of introducing the current into the interior of the globe was overcome by imbedding a fine platinum wire in the glass, connecting the enclosed carbon with the external circuit. Edison's first patented carbons were made from brown paper and ordinary cardboard. They were soon abandoned on account of their fragility and short life, and in 1880 a more durable carbon was perfected, made of the filaments of bamboo, taken from the fibrous portions of the plant.

A Kansas Editor

THE editor of a Kansas country newspaper has found a way of persuading delinquent subscribers to pay up. It was quite accidental. It appears that he had borrowed a rifle and started up the main street of the town to return the weapon to its owner. The delinquent subscribers got it into their heads that he was on the war-path, and everyone he met insisted on paying what he owed him. One man wiped out a debt of ten years' standing. On his return to his office he found a load of hay, fifteen bushels of corn, ten bushels of potatoes, a load of wood, and a barrel of turnips that had been brought in. All the country editors are now trying to borrow Winchester.



## Peach Doings

THE perfect form and rich-tinted downy skin of the peach make it the handsomest of all fruits, and its exquisite, juicy flesh make it the most delicious. Its useful properties are quite as marked as its flavor and beauty, as it is one of the best of all fruits for purifying the blood, a generous diet of it being claimed to impart clearness, brilliancy and delicacy to the complexion.

In its season it cannot be used too frequently, and the delightful variations which may be made with it, from day to day, make satiety almost an impossibility. One of the simplest and most delicious forms of serving it is in custard. Very fine, ripe peaches are required to make this in perfection. Pare them thinly with a narrow-bladed silver knife and then rub them through a sieve. To a pint of the pulp allow the yolks of four eggs, two cupfuls of rich milk, three fourths of a cupful of granulated sugar, and half a teaspoonful of almond extract. Beat all very thoroughly together, and cook in a double boiler until thickened, but it must not be allowed to boil. When cooled turn into a deep glass dish. Whip the whites of the eggs to a very stiff froth, add two tablespoonfuls of powdered sugar, and drop in large spoonfuls in a broad shallow pan of boiling water, cook a minute on one side, then turn them over and cook the other. Remove with a skimmer to a large plate, and keep in a cold place until time to serve, then place them over the custard. Serve all very cold.

A delicious peach tapioca is even more easily prepared. Soak one half cupful of tapioca in water to cover, over night or for a couple of hours. In the morning add three cupfuls of milk and cook in a double boiler until perfectly clear. Beat the yolks of three eggs with one small cupful of white sugar, stir them quickly into the tapioca, let just come to the boiling point again, and remove at once from the fire. Stir in one pint of fine, ripe peaches, pared and sliced very thin. Serve this very cold with or without whipped cream.

To make peach cream, pare and slice eight large, ripe peaches, and cook them until tender in a syrup made with a gill of water and four tablespoonfuls of white sugar. When cooked let get cold, then rub them through a sieve. Whip one pint of cream to a stiff, dry froth, add the peach pulp, and one ounce of gelatine which has been soaked in a cupful of cold water and thoroughly dissolved in a cupful of boiling water. Mix all well together, stirring occasionally until the mixture begins to set. Then turn into a wetted mold and set on ice until firm.

Peach float is an old-fashioned dainty still more keenly enjoyed than many more novel and elaborate dishes. Pare and slice eight large, fine, ripe peaches and place them in a deep glass dish; sprinkle thickly with granulated sugar and chopped blanched almonds, and pour over them a custard made with one pint of rich milk, the beaten yolks of three eggs, half a cupful of white sugar and half a teaspoonful of almond extract. Heap over the top a freshly made meringue, using the whites of the eggs and half a cupful of powdered sugar.

A cheap and delicious peach pudding is made as follows: Pare and slice eight fine, ripe peaches and place them in a deep pudding dish. Stir one tablespoonful of corn-starch smoothly in a little cold milk, add to it one large cupful of hot milk, and cook over hot water until smooth and thick. Pour in slowly over the beaten yolk of an egg and stir in half a cupful of granulated sugar. Stir over the fire just to boiling point again, flavor with lemon or almond, and pour it over the peaches. Beat the white of the egg with a tablespoonful of powdered sugar to a stiff snow, spread it over the pudding, leave it in a very slow oven until a pale straw color. Serve cold with or without whipped cream.

Peach crust is a favorite with masculine palates, scarcely second even to the well-loved pie. Mix together one beaten egg, a pinch of salt, a piece of butter the size of an egg, two gills of milk, a teaspoonful of baking-powder, and flour enough to make a soft dough. Spread this about an inch thick in the bottom of a small, buttered baking dish. Cover it thickly with pared and halved peaches, having the hollow side up, and sprinkle over them plenty of granulated sugar to fill the peach hollows. Bake in a quick oven for half an hour, and serve hot with sweet liquid sauce flavored with almond.

Whipped peach cream in baskets is an especially dainty dish for dessert or evening refreshments. Beat the whites of four eggs to a very stiff snow, add slowly while whipping four tablespoonfuls of granulated sugar, and two tablespoonfuls of rich peach syrup (drained from preserved peaches); stir in lightly one pint



## The Housewife

of whipped cream delicately flavored with almond, and whisk all to a very stiff froth, keeping the bowl containing the ingredients in a pan of cracked ice. For the baskets use small round or oblong sponge cakes which have had the centers scooped out until only a wall three fourths of an inch in thickness is left. Cover the outside of the cakes with a little pink icing, flavored with peach or almond, and stick halved English walnuts around the top. Coconut macaroons make dainty and



THE BUSY HOUSEWIFE

delicious little baskets also. Stick them together in basket shape, using one for each side and one for the bottom, and stick on tiny handles of thin strips of candied citron. Do not put in the filling until just before time to serve.

To utilize the crumbs removed from the cakes in the preceding recipe, peach delight is quite true to its name. Mix one cupful of sponge-cake crumbs in one quart of milk, add half a cupful of sugar, the well-beaten yolks of four eggs, the stiffly whipped whites of two, and a teaspoonful of almond extract. Bake in a moderate oven until firm in the center. Spread over the top a generous layer of mashed and sweetened peach pulp, and



Photo by Cora June Sheppard

"PEONIES INHERITED FROM MY GRANDMOTHER. THEY ARE AN ANNUAL RESURRECTION TO HER MEMORY"

heap over this a meringue made with the whites of two eggs and two tablespoonfuls of powdered sugar. Leave in the oven with the oven door half open until very lightly browned, then dot the top with little mounds of red currant jelly or raspberry jelly, and serve at once.

Another dainty made with stale cake and peaches is trifle. Cut any stale light cake into nice-sized slices, and arrange with alternate layers of ripe, sliced peaches (sprinkled with powdered sugar and chopped almonds) in the bottom of a deep glass dish. Over this pour, while still rather warm, a custard made with the yolks of four eggs, four tablespoonfuls of sugar, two cupfuls of milk, and half a teaspoonful of lemon extract. Serve very cold. Just before serving spread over the top the whites of the

four eggs whipped to a very stiff snow with four tablespoonfuls of powdered sugar.

A delicious iced dessert made without freezing is peach mousse. Pare and slice enough ripe, rich-flavored peaches to make a pint of pulp when rubbed through a sieve. Flavor with a teaspoonful of almond and add a small cupful of sugar. Mix well together and stir lightly in one quart of cream which has been whipped to a stiff, dry froth. Pack the mousse in a plain, wetted mold, put on the top, and bind around the edges with a strip of buttered muslin. This must be put on tightly to keep out the salt water. Bury the mold entirely in a mixture of salt and ice, and leave for four hours to ripen.

A much-prized peach dessert we have called peaches a la royale. Allow two large ripe peaches for every person to be served. Pare them, cut in halves and remove the stones. Cook them very gently in a rich sugar syrup until tender but not broken. Mix together half a cupful each of powdered sugar, chopped seeded raisins and finely chopped blanched almonds. Lift the peaches from the syrup with a skimmer, and roll each half in the sugar mixture until well coated, placing each as done in a deep glass dish. Set on ice until thoroughly chilled. Just before serving pour over one pint of cream which has been sweetened, flavored with almond, and whipped to a stiff, dry froth. Serve with any delicate cake.

To make a peach meringue, pare and slice enough ripe peaches to make a quart. Put them in a pudding dish and sprinkle lightly with sugar and coconut. Make a meringue with the stiffly whipped whites of three eggs and three tablespoonfuls of powdered sugar. Spread this over the peaches, and place in a very slow oven until a pale straw color. Serve very cold with a custard made with the yolks of the eggs, two cupfuls of milk, two tablespoonfuls of sugar and a teaspoonful of lemon extract.

A delightful combination of peaches and pastry is in "fingers." The old-fashioned "lady-lock" sticks are used for these. Cut puff paste into strips an inch wide and twelve inches long. Roll them around the sticks, brush with the white of egg, and dust with powdered sugar and chopped, blanched almonds. Bake in a quick oven until done, then lift from the sticks, and set them aside where they will not get broken until time to serve. They should not be filled until just before they are to be eaten. For the filling whisk the whites

of vanilla; put this on the cake when each are cold. Then melt two squares of chocolate in a bowl placed over the teakettle, and pour on top of the cream after it is on the cake.

**SPLIT-PEA CUTLETS**—A delicious dish known as cutlet, or vegetarian beef-steak, is made as follows: Soak one and one half pints of split peas in water over night, with a pinch of soda. Put in a double boiler with water enough to cover them, a sprig of thyme, two cloves, a little garlic and a little pepper from which the seeds have been removed. Steam until the peas are tender, drain and partly mash them. Mix with the peas a very little minced onion or celery. Form into balls like fish cakes. Shake over them a dash of pepper, dip first into a beaten egg and then in Indian meal or bread-crumbs, and fry. These cutlets are very substantial. Dried lima beans may be prepared in exactly the same way, except that a little tomato or minced parsley adds greatly to the flavor.

**CALF'S HEART**—Calf's heart is very delicate when properly prepared. Wash the heart, but do not let it soak or stand in the water. Fill it with a stuffing made of minced meat or bread, either one of them seasoned with onion, sage, thyme, salt and pepper, and an egg to bind it. Bake it for two hours, basting it frequently with water from the pan. When the heart is cooked, remove it and add to the pan a tablespoonful of flour, which should be stirred until brown. Strain this and pour over the heart.

**APPLE SHORTCAKE**—Make some rich short pastry and line a circular tin or plate with it. Bake it till done, cover with a layer of apple puree, and over this place a lid of pastry. Ornament the edges and bake till the upper crust is done. Lift the upper crust off carefully, put some sweetened cream over the apples, replace the cover, serve immediately.

**PEACH CAKE**—This cake is a much appreciated novelty. Make the cake by any good recipe, cover the top with a plain icing and fill between the layers with a filling made of one cupful of peach pulp mixed with one cupful of whipped cream and half a cupful of powdered sugar.

**FISH SALAD**—Ingredients: Cold cooked fish, salad of lettuce and tomato, yolks of two eggs, two tablespoonfuls of salad oil, one tablespoonful of vinegar, pepper and salt and sugar. Take some cold cooked fish, skin it and remove the bones and cut in neat slices. Arrange a nice salad on a dish, with slices of fish on the top. Beat the yolks of two eggs in a basin with a wooden spoon, and gradually add the vinegar; stir one way only as the oil is slowly added. Season with salt, pepper and sugar. Coat each piece of fish with this sauce just before sending it to table, and garnish the dish with slices of tomato and hard-boiled egg and any pretty suitably flavored garnish. For an elaborate salad remove the yolks of eggs, pound with anchovy essence and replace; then cut into slices.

**HARTSHORN CAKE**—Two cupfuls of A sugar, three eggs, one pint of lard and butter mixed, five cents' worth of powdered hartshorn dissolved in a little hot milk, flour enough to roll. Do not mix stiff or cakes will be tough.

**HICKORY-NUT CAKE**—One and one half cupfuls of granulated sugar, whites of four eggs well beaten, three fourths of a cupful of sweet milk, one half cupful of butter, two cupfuls of flour, two teaspoonfuls of baking-powder, one cupful of chopped hickory-nuts.

## Politeness at Home

MANY years ago, when I was teaching a little school in a backwoods country, I one day took a little eight-year-old girl on my lap and said to her, "Maggie, do you know what it means to be polite?"

"Of course I do!" was the ready response. "It means to act nice when you are away from home." I could not help laughing, but during the years that have passed since then I have found that there are very many people—big and little—whose opinion of the term "politeness" is similar to that of the little maid.

All mothers impress on their children the value of acting properly while out in company, but many neglect to teach them the necessity of using good manners at home. As soon as a child is old enough to connect his words into sentences he can be taught to say "Please excuse me, brother," "Thank you, sister," and as he grows older he will see that true politeness is simply being kind and thoughtful for others. As St. Paul wrote, "Be kindly affectioned one to another with brotherly love in honor preferring one another." If the children are polite at home it needs must follow as the day the night that they will be polite when in society. This is one of the things we can only learn to do by doing. See to it that your child practises the small, sweet courtesies of life at home, and it will soon become second nature to him. PEARL CHENOWETH.

MARY FOSTER SNIDER.

## Useful and Appetizing Recipes

**CARAMEL CAKE**—One cupful of butter, two cupfuls of sugar, three cupfuls of flour, three eggs, one cupful of milk, one scant teaspoonful of cream of tartar one half teaspoonful of soda. Bake in two round jelly tins.

**CARAMEL FROSTING** (for filling)—One cupful of granulated sugar, scant half cupful of milk, butter the size of a nutmeg; cook fifteen minutes, then beat to the consistency of cream, add one teaspoonful



## Heroines of the Revolution

PART I.

"A SMART wife would have put Howe in possession of Philadelphia a long time ago," said John Adams, writing to his wife, thus indirectly bearing witness to the value placed on woman's influence in the struggle for American independence. General Washington, in his letter of acknowledgement to the committee of ladies, put on record his opinion of their services. "The army ought not to regret its sacrifices or its sufferings, when they meet with so flattering a reward, as in the sympathy of your sex; nor can it fear that its interests will be neglected, when espoused by advocates as powerful as they are amiable."

Throughout the Revolution, wives and daughters promoted the spirit of patriotism. Many were the ways in which they manifested their devotion, from the feeding of the hungry patriots to the equally feminine expression of partisanship made by a Colonial maiden who flaunted thirteen plumes in her bonnet, in avowal of her sentiments. An association of North Carolina women signed a paper that called for no small sacrifice in those tea-drinking days:

We, the Ladys of Edmonton, do hereby solemnly engage not to Conform to that Pernicious Custom of drinking Tea, or that we the aforesaid Ladys will not promote ye wear of any manufacture from England, until such time that all Acts which tend to enslave our Native Country shall be repealed.

A letter written by a lady of Philadelphia to a British officer in Boston, is instinct with the spirit of renunciation:

My only brother I have sent to the camp with my prayers and blessings. I hope he will not disgrace me; I am confident he will behave with honor, and emulate the great examples he has before him; and had I twenty sons and brothers they should go. I have retrenched every superfluous expense in my table and family; tea I have not drunk since last Christmas, nor bought a new cap or gown since your defeat at Lexington; and what I never did before, have learned to knit, and am now making stockings of American wool for my servants; and this way do I throw in my mite to the public good. I have the pleasure to assure you that these are the sentiments of all my sister Americans. They have sacrificed assemblies, to that great spirit of patriotism that actuates all degrees of people throughout this extensive continent.

"He is wanted," said a New England mother, as with her own hands she bound knapsack and blanket on the shoulders of her only son, a lad of sixteen, "he must go." Then, turning to her daughter, who begged, with tears, that her brother might remain to protect them, "You and I, Kate have also service to do, for before to-night hundreds, I hope thousands, will be on their way to join the Continental forces. Some who have traveled far will need refreshment, and you and I, with Mollie, must feed as many as we can." When the weary patriots trudged by they had cause to bless the forethought of Dame Draper. Pans of bread and cheese and tubs of cider were ready for them, and their hostess presided over the long board spread by the roadside. At another halting place one hundred men were regaled on the contents of a huge brass kettle of hasty pudding, and the milk of a herd of cows, which the housewife had gathered in the barnyard to contribute their share to the impromptu breakfast.

In New Rochelle a mother melted all her pewter into bullets and gave them to her two sons, with the command to join the army. "Remember to do your duty," were the parting words of a wife, whose husband was about to join the troops. "I would rather hear that you were left a corpse on the field, than that you had played the part of a coward."

The services of women as spies were frequently availed of, and many a danger was guarded against through the timely information gleaned by the tireless feminine allies. A "sprightly maiden," Mary Redmond, under cover of a game of romps, wrested papers from a market boy, who carried despatches in the lining of his coat. Mary was an ardent rebel, but withal fairly cautious, for her historian tells us that, when she was apprized of Burgoyne's surrender, the damsel, not daring to express her exultation openly, thrust her head up the chimney and cheered for General Gates.

"The worst rebels in New York," declared the surly marshal of the New York prison, annoyed by the persistence of the New York women who visited the prisoners, and left undone nothing that would ease their misery or aid their escape. The



## The Housewife

intrepid Quakeress, Deborah Franklin, who was banished from New York for her liberality in relieving the wants of the prisoners, was but one among many who came under the ban of the enemy's displeasure.

Scenes in the Wyoming valley form one of the darkest chapters in the history of a crucial period, but even the awful stress of such warfare did not daunt the heroic women who, in the absence of the men, became the protectors of their helpless ones.

On the night of the third of July, a Mrs. Gould, with the women who still remained in Wyoming, sought refuge in the fort. Her brother-in-law, one of the brave men who survived the massacre, was with



LINGERIE BELT AND SILK GIRDLE

her family, but many of the terrified inhabitants had already fled. It was quite dark when they entered the fort, and so great was the terror and confusion that it was not perceived till they went in that a boy four years old, one of Mrs. Gould's children, was missing. The effect of this fearful discovery on the mother may be more readily imagined than described. Disregarding all remonstrances and entreaties not to expose herself to deadly peril, she set out immediately, alone and in the darkness, to search for the missing child. For more than an hour she wandered, seeking him in every spot where it was likely he could have strayed; taking her path across the plain strewn with the dead and dying of the recent battle—where the savages, eager for blood, were still lurking—fearing only for her child, lest he might be lost in the river, or might have fallen into the hands of the merciless red men. At last the little truant was found playing with some other children, on the banks of the river. Snatching him to her bosom the young mother hurried back to partial safety.

The next morning, realizing that their only hope lay in flight, the refugees in the fort prepared to depart. Mrs. Gould and her four children were placed on a bed, which was strapped to a horse that had belonged to Mr. Gould. Thus she entered on the memorable journey through a wilderness. Every pathway was thronged with women and children, and men too old to serve in the army. In one party of fugitives numbering one hundred there was only one man. "Paint the throng climbing the heights!" exclaims a writer, as he vividly depicts the scene, "hurrying on, filled with terror, despair and sorrow. Take a single group; the affrighted mother whose husband had fallen, an infant on her bosom, a child by the hand; an aged parent slowly climbing the rugged way behind her; hunger pressed them sorely; in the rustling of every leaf they hear the approaching savage; the valley, all in flames behind them; their cottages, their barns, their harvests, all swept away in the flood of ruin."

Mrs. Gould was moved beyond endurance by the misery surrounding her. With the prospect of a long and perilous journey before her, she dismounted, took down the children, and with the youngest in her arms, pursued her way on foot, leaving the horse for the use of those fugitives who, from sickness or old age, were unable to accomplish a journey of any length on foot, or even to make good their escape. With a heart filled with forebodings of evil, she turned her face toward the rising sun, and with her young children resumed the toilsome march seventy miles in length; sleeping at night under the canopy of heaven, subsisting on fruits of the forest and the handful of spoiled meat which was all she had been able to secure in the way of provision for the journey. But her unflinching trust was fixed on him who feedeth the young ravens when they cry. Sustained and guided by his protecting care, they at length reached the Delaware in safety.

[TO BE CONTINUED NEXT ISSUE]

### Silk Girdle

ONE of the prettiest of girdles to be worn with a white dress is here given: an eight-inch-wide piece of light-blue silk hemmed on the sides is gathered into the shaped stiffened piece that serves as a buckle in front, a shorter one in the back, and much shorter, or the same as the back one at each side. These supports are made of canvas, with wide, flat featherbone stitched through the center, covered smoothly with the silk and stitched neatly. The soft silk must be cut the right length, minus the width of the piece, which acts as a front buckle. It is split in two and joins close with small hooks and eyes.

Of course dresden or any color can be used, or sash ribbon instead of the piece silk, it is a style exceedingly becoming to a slight figure, and the amateur will find it very simple to make, using the illustration as a model. The depth must be according to the figure of the person who is to wear it. M. E.

### Lingerie Belt

THE most popular belt of the season is of white duck or linen, embroidered in D. M. C. cotton. Cut the material lengthwise, the number of inches necessary, and the desired width, allowing plenty of room for the scallops to be worked. The surplus can be neatly cut away when the work is finished, and laundered. Different styles of scallops are used with set designs for eyelet-work, or small flowers to be worked in French or satin stitch. Sometimes a light color is used for the embroidery and is very effective, but plain white is most durable and most popular. A white pearl buckle is preferable to gold or silver. M. E.

### To Wash Colored Fabrics

THE dainty colored summer fabrics can be laundered to look like new if washed in starch water. Make a gallon of starch with half a cupful of corn-starch wet in a little cold water until smooth and then four quarts of boiling water poured



SECTION OF SILK COMFORT

over it. Put three fourths of this into a new dish-pan and add two gallons of tepid water, and add as much water to the remaining quart of starch. Wash the garments in the thickest starch water then in the thinnest starch, rinse in clear water, and dry in the shade. Sprinkle and iron upon the wrong side. Blues are apt to look faded after ironing, but after a few hours the color returns.

MRS. H. L. MILLER.

### Some Good Things to Know

**TO KEEP THE BRASSES CLEAN**—Brass utensils of all kinds will clean beautifully if done in the following way: One pennyworth oxalic acid, one pennyworth whiting. Mix together with warm water to the thickness of ordinary polishing paste. Apply with soft flannel and polish.

**ENAMEL FINISH FOR SHELVES**—An excellent idea for pantry shelves is to give them two coats of ordinary white paint, and then a third finishing coat of white enamel. As soon as the enamel dries, wash it over with cold water, and then it will harden quickly. Do not cover these shelves with oilcloth or paper, but leave them bare and notice the improvement. As there are no covers under which

crumbs, etc., can collect, there is nothing to encourage mice, and the enamel is easily wiped clean with a damp cloth. With enameled shelves it is never necessary to clean out the whole pantry at once, for it keeps clean all the time.

When furniture is in a bad state, but not stained, it may be washed clean with spirits of turpentine, then polished up with linseed-oil colored with alkanet root. When the articles are stained or inky they should be washed thoroughly with warm vinegar, the stains then being rubbed with a rag dipped in spirits of salts. Linseed-oil and alkanet root, or beeswax dissolved in turpentine with a little copal varnish or resin added, may be used for polishing.

Onions are a very fine disinfectant. Cut two or three good-sized onions in halves and place them on a plate on the floor; they absorb noxious effluvia, etc., in the sick-room in an incredibly short space of time, and are greatly to be preferred to perfumery for the same purpose. They should be changed every six hours. This is also a simple remedy for removing the smell of fresh paint. The onions are poisonous afterwards.

The application of a bit of soap on the point of a lead pencil to a creaky hinge will cure its stiffness and silence its complaints.

**GOOD SUBSTITUTE FOR PUTTY**—A cheap and effective substitute for putty, to stop the cracks in floors and other wood-work, is made by soaking newspapers in a paste made by boiling a pound of flour in three quarts of water and adding a teaspoonful of alum. This mixture should be about the consistency of putty, and should be forced into the cracks with a blunt knife. It will harden as it dries, and then may be painted or stained to match the boards. If the cracks are neatly stopped, they will, after painting, be hardly perceptible.

### Silk Comfort

NEXT to an eider-down comfort, one filled with nicely carded wool is quite as acceptable. Make as the illustration, which consists of three-inch bags of drapery silks, stuffed with the wool, sewed in rows and then all put together, any desired size. The whole is very attractive, warm and not a heavy covering. M. E.

### Jewish Sponge Cake

THIS cake is as delicate as angel cake but of a golden color. Weigh eight fresh eggs, take half their weight in pastry flour and their weight in powdered sugar. Beat the whites perfectly stiff and place upon ice, and then beat the yolks and sugar together for twenty minutes, add the whites and beat ten minutes, add a tablespoonful of lemon juice and beat five minutes, a teaspoonful of vanilla and beat five minutes, then the flour that has been sifted nine times and beat five minutes. Pour into a cake tin and bake in a medium quick oven. While considerable work to make, this is a perfect sponge cake if directions are followed.

MRS. H. K. MILLER.

### Fomentations for the Sick

THE following are directions for applying fomentations: There is probably no other application that will give relief from extreme pain in a greater variety of cases than the fomentation, and every family should have a set of cloths for that purpose, and know how to use them. A single flannel bed-blanket quartered and a panful of boiling water furnish all the apparatus necessary. Fold a cloth into thirds, then gather the ends into your hands and dip the middle of the cloth into the water to within four or five inches of the end. Take out the cloth and twist the ends in opposite directions until the cloth is wrung as dry as possible, then quickly untwist the cloth and fold large enough to cover well the part to be treated, and wrap in a dry flannel, leaving one thickness of dry flannel between the wet one and the patient's skin. The treatment should always be finished by sponging the part with a cloth wrung from cool water, or, if the patient is perspiring freely, by a cool sponge-bath, or, better still, of putting him into a bath-tubful of water at ninety-eight degrees and gradually cooled to eighty-five degrees.

To remove soreness or relieve pain in cases of cold on the lungs, acute inflammation of the stomach or bowels, lumbago and backache a cloth should be folded into thirds as above, the ends folded to meet at the middle, then applied over the part, and changed every three or five minutes until relief is obtained.

The fomentation applied to the throat is a valuable aid in cases of sore throat or tonsillitis. Applied to the spine fifteen or twenty minutes at bedtime it is very quieting to the nerves, and often gives sleepless people a good night's rest. It should be about six inches wide and reach the entire length of the spine.

Never remove one until you have another ready. J. P. S.



## The Little Boy Who Ran Away

There was once a little boy who didn't like to go to school. He lived a long time ago in a far-away country. His teacher was kind and the schoolroom was pleasant, but the little boy thought he would be perfectly happy if he could stay at home with the grown folks and the babies.

Every morning he went to school crying and every noon he started on his way grumbling. While he was at home he spoiled the fun he might have had by complaining about school and teasing to stay out the next day. At last the little boy's father and his mother, his grandfather and his grandmother and two aunts who happened to be visiting, met in the sitting-room to talk the matter over. They knew that something must be done to make the boy willing to go to school.

"Sonny," began his father that night at bedtime, "I've been thinking that it is a shame to make a boy go to school when he doesn't want to."

"So do I, too," added the boy quickly.

"Well," continued the father, "of course you know that folks who stay at home have to work."

"I'd ruther work," interrupted the boy.

"All right, Sonny, but remember that a working man's day isn't done at four o'clock when school is out."

"I don't care, anything's better than going to school. How long can I stay, anyway?"

"Well, Sonny, you may stay at home as long as you do willingly what you are told. After that I will see if I can get some farmer to take you."

Although the little boy stared, he went to bed happy. Early the next morning his mother called him.

"Hurry," she said, "I want you to get me a basket of chips quick as you can. The fire doesn't burn well and breakfast must be on time so the children won't be late to school."

"Let Sammy," the little boy replied, "he's all dressed."

"No indeed, I want you. Hurry now. You know Sammy goes to school. Folks who stay home are the ones who always have to work."

Sammy grinned; but the little brother frowned as he hastened to obey his mother. The child never knew before how much work had to be done before breakfast. It was "Sonny" here and "Sonny" there. His mother kept him busy.

After breakfast the little fellow started out to play leap-frog with his brothers, when Grandma called him to hold a skein of yarn. Oh, how slowly she did wind that yarn and how the little boy's arms ached before the ball was finished! Then Aunt Ellen called him to dust the sitting-room.

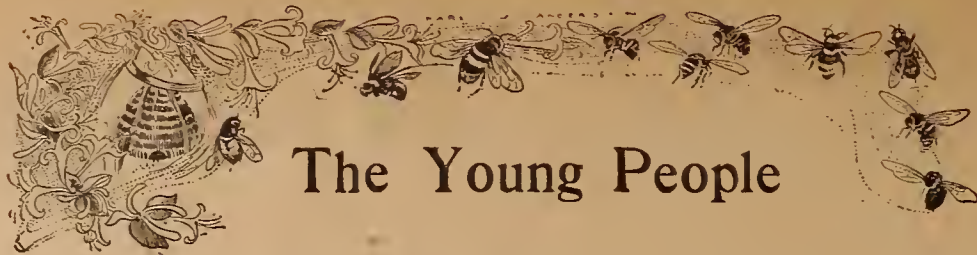
"That's Edna's work," he pouted.

"Yes, dear," was the reply, "but Edna is getting ready for school, and your mother says you are to do all the dusting after this."

It was Aunt Ellen's turn to smile when the little boy seized the duster and began flourishing it in a savage fashion. She had to walk away quickly to keep from laughing aloud. Dusting was bad enough, but when the little boy's mother called him to wheel the youngest baby up and down the sidewalk and the other children grinned, he wished himself in China.

The boy was still wheeling the baby when the band-wagon came, and wonder of wonders, the driver stopped and told the children to climb in as he was going right by the schoolhouse and could take them just as well as not.

"Oh, mamma,



## The Young People

mamma, come here quick and get your baby!" shouted the boy. "I've changed my mind and I'm going to school!"

It seemed hard but the little boy's mother wouldn't let him go. She said that all the grown folks were depending on his help. It was so nice to have one boy willing to stay at home. There was always

the hot sun. Your father was going to hire a man to weed the garden, but he says as you have given up going to school it will be good work for you."

Poor Sonny stopped sprouting potatoes for a second and looked discouraged. Queer way to cheer a boy! Usually Aunt Rose was comforting, but that morning



THE BOYS IN CAMP

Photo by Miss Carrie Ihde

so much to do in a large family. Grandma had just discovered two bushels of old potatoes in the cellar that were beginning to sprout. Oh, how the child hated the very smell of the potato bin! But down to the cellar he had to go. He wondered what the teacher would say when she called the roll and he wasn't there to answer to his name. She would look surprised and—sprouting potatoes was disagreeable. Snip, snip, snip! Would he ever get through!

All at once there came the sound of light footsteps down the cellar stairs. Aunt Rose was coming. Even the potato bin seemed bright when she appeared. For a moment Aunt Rose couldn't see the little boy in his dark corner.

"Oh, there you are!" she exclaimed "You poor little fellow, I knew you would be lonesome down here so I thought I would come and cheer you up. Slow work, is it? Well, I'll help you. Really though, I think it is more comfortable down here than it will be pulling weeds in

everything she said made the little fellow feel worse and worse. She said of course she hoped Sonny would be a credit to the family, even though he never went to school. There was no reason why a man shouldn't be good and honest if he didn't know anything about books. Aunt Rose said she would certainly bow and smile to Sonny just the same, even if he had to dig ditches for a living, or be the ash-man. It did seem a pity of course that he had chosen to give up school, because Aunt Rose always thought he might be a great man sometime, the President of the United States, perhaps.

After a while the young lady sighed. She reminded Sonny that keeping the bugs off the potato-vines in the garden later on would be hard work. She said she was sorry but she couldn't help on the potato-bug business.

"Why, Sonny, I wouldn't touch a potato-bug for anything!" declared Aunt Rose, but the next minute she was alarmed. Tears were running down Sonny's cheeks.

"Aunt Rose," he sobbed, "I am going to run away!"

This was more than Aunt Rose expected. "Dear child!" she exclaimed, "that won't help you, and folks are not apt to be kind to runaway boys, you may be sure of that!"

"Makes a difference where you run to," interrupted the child. "I am going to run away to school!"

When poor Sonny reached the schoolhouse the teacher sent him to wash his face the first thing. Next, she kept him in his seat all through recess because he was so late. Strange as it may seem the child didn't feel his punishment. It was so much pleasanter to be a little boy in school instead of an old man aged one hundred, sprouting potatoes in a cellar.

## Sparrows Beaten by a Hen

Few mothers have triumphed over more difficulties in the rearing of their families than Nellie, a little brown hen whose home is in a box on the banks of the Chicago River, near North Avenue. Besides the perils of steam and street cars, of heavy traffic and deep ditches, Nellie has been forced, literally, to fight for the protection of her brood ever since she brought the little ones into the world, three weeks ago. In that time she has killed twenty sparrows, members of a colony seemingly entered into a pact to destroy her offspring. The birds have killed four of Nellie's chicks, half of her family.

War was declared between Nellie and the sparrows the morning the little hen proudly came from her nest with her eight tiny chicks. The trouble started over a dish of corn-meal provided by a bridge-tender for the hen and chickens. The sparrows wanted the meal, and to get it made a concerted attack on the hen and chicks. Nellie killed four sparrows in the first battle, while the birds took the lives of two little chickens.

The scrimmage ended with the sparrows in flight, but a guerrilla warfare has followed. The sparrows have succeeded only twice in their efforts to isolate Nellie's young ones, but on those occasions quickly beat the little chicks to death with their wings and bills. The chickens have now reached an age to be able to fight back when attacked, and the sparrows are giving up the fight.—From the Chicago News.

## The Puzzler

The regular puzzle drawing has been omitted from this issue, but the Puzzle Department will be continued. Answers to July 15th puzzle are: Browning, Whitman, Longfellow, Milton, Tennyson, Burns.

## Nests in Mail-Boxes

Since free delivery of mail in rural districts has been established I have been pleased to discover two or three pairs of bluebirds nesting undisturbed in mail-boxes by the roadside.

It is gratifying to know that the birds allowed themselves to be disturbed two or three times a day and yet did not abandon their nests; but the thing that gives the bird lover the greatest delight is the fact that no one robbed the nests.

I am quite sure the bluebird will in time learn to appreciate this kindness, and I sincerely hope that the day is not far distant when it will be a common occurrence to find a bird's nest, in every homemade box that holds a letter.—From St. Nicholas.



PICKING APPLES IN THE ORCHARD

Photo by R. D. Von Niede





### Sunday Reading

#### Miss Booth's Slum Tales

MISS EVANGELINE C. BOOTH, daughter of the founder of the Salvation Army, lately interested a large audience in New York with tales of her life in the slums of London. Dressed in rags—a tartan shawl, a tattered print skirt and broken-heeled shoes laced with string—Miss Booth told how she had gone among the poor to lead their life. The good results of this slum work is best illustrated by some of the stories Miss Booth told. For instance:

"I was sitting one night in my little room, when the door opened and a woman walked in. She sat down by the fire without a word. I let her alone, because I knew she was in trouble. Finally she said:

"They say she died of cancer, but it's a lie! He done it with his fist. He's drunk now. 'Cos why? Minnit she died he come in an' tuk the clothes off the baby an' put 'em up the spout."

The audience forgot all about its being a religious meeting. Somewhere, unseen, a violin was sighing Handel's "Largo." Miss Booth, still acting the ragged rôle of Soho, went on to tell how she put on her shawl and went to the cellar where the mother was dead. She did not dwell upon the morbid side of it, but said she found two children, too little to talk much, curled up together on the damp floor. She took them to the room, where she bathed them, gave them warm milk, and dressed them like little angels.

"Suppose he comes after them?" suggested Miss Booth.

Three days later he came, very drunk and profane. Miss Booth tackled him. He proposed to wring her neck and other things. Miss Booth told him he would not get his babies, but he might see them. She led him upstairs to the room, and showed him the babies—their hair combed out, their faces shining with soap and water, both curled up in bed. The man swore hard for two minutes; then stopped short, burst into tears, and said:

"Is them my kiddies?"

He never drank again.

Miss Booth told another story with which she had nothing to do, having only heard it when it was too late to prevent the tragedy. She said:

"There is nothing accomplished in this world without sacrifice. I need only remind you of Francis of Assisi, Florence Nightingale, and Dr. Livingstone to prove this. But this little fellow, whose name I do not mention because it would make no difference, was greater than them all.

"He was a street arab. He met his pal, Jim, under a street lamp one night.

"Jim," he says, pulling a clipping out of his pocket. 'Is this on the bonny fidy? Is it on the bloomin' level? You read it.'

"Jim read it—a coupon cut from a periodical which said that if anyone met death with this coupon in his or her pocket and the name of the deceased's nearest relative written in, \$5,000 would be paid to the person so named.

"Next morning the street arab was found with his head crushed. In his pocket was the coupon with the necessary information filled in like this:

Mrs.....  
widdow  
10 Devvils ally  
the munny to be pade to mrs ——— wich  
is my muther

"The policeman who found this paper in the boy's pocket cried like a baby and saw to it that the widow mother got what was needed. She was supporting a lot of children on what she made from making match-boxes and sticking on the labels at 4 cents a gross, paste supplied by herself. The boy had been thinking."

#### Popular Girls

EVERYBODY likes girls who do their best to be pleasant and courteous at all times, says "McCall's," who do not repeat unpleasant remarks made about you by other girls; who, although they cannot boast of a spare penny, always look neat and nice; who are lavish with their smiles, and are sorry when they are obliged to frown; who look out every day for the happy things of life; who try to jump over all the little ridges that break up the smoothness of their path, who are happy because they make people about them see the sunshine; who always have a good word for everybody; and who appreciate the fact that the world was not made for them alone.

Thackeray truly remarked that the world is for each of us much as we show ourselves to the world. If we face it

with a cheery acceptance we find the world fairly full of cheerful people glad to see us. If we snarl at it and abuse it, we may be sure of abuse in return. The discontented worries of a morose person may very likely shorten his days, and the general justice of nature's arrangement provides that his early departure should entail no long regrets. On the other hand, a man who can laugh keeps his health, and his friends are glad to keep him.

#### Why the City Boy is Bad

THERE is in the present-day city life absolutely no place in the economic community for the man-child between four and fourteen years of age. There is no place or condition where he becomes a natural, essential factor of the social body. Nobody really needs him or wants him. His mother may ask him to run a few errands, but there is rarely any attempt to require of him the performance of regular daily duties. He has nothing to do, and is forced to play or loaf.

His father's place of business is usually far from home, frequently behind walls and fences with "No admittance" over doors or gates. Even if the boy can visit his father and see him at work, the differentiation of labor is so great that the purpose of the father's task is often incomprehensible to the child.

After a few minutes the novelty of watching the wheels go round wears away, and his naturally active mind and body carry him to where he will again be kicked off the neighbor's lawn, ordered from vacant lots or streets because of his noise, until finally, an outcast and a wanderer on the face of the earth, in self-defense he forms a band or gang to fight for or to gain secretly his rightful share of innocent pleasure, and then, by an always easy road, he usually passes to a more questionable occupation.

With the girl it is somewhat different. Even in a modern apartment house overstocked with servants, there are certain household duties that may be required of her. Her traditional games are more closely associated with the home, and can be played better indoors. The mother's life is centered in the house and is not associated with others in so complicated a way as the father's. The girl sees, hears and takes a part in the housekeeping plans. She is truly at home, while the boy may be a stranger under his father's roof, having no necessary connection with the institution of home. Thus the girl may have an opportunity to learn to work, while the boy is usually forced to play.—By Charles C. Krauskopf, Secretary of Illinois Society for Child Study.

#### "Bread Upon the Waters"

A STORY with a moral and growing out of the recent California disaster, is told by the Atlanta "Georgian."

Two days before the earthquake a benevolent Hebrew merchant upon one of the prominent streets of San Francisco engaged in conversation an honest farmer from the country round about. The merchant exploited to the farmer the value of his wares and set about to induce the farmer to become a purchaser. The farmer, frankly admiring the outlay of the merchant, confessed his financial inability to invest, and without ostentation told the story of some recent misfortunes which had left him without money even for the ordinary necessities of his family. Upon the strength of this statement, whose sincerity was attested in the honest face of the son of the soil, the Hebrew merchant took a five-dollar gold piece from his pocket and asked the farmer to accept it as a temporary relief.

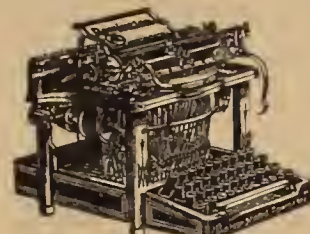
That closed the incident for the day, but when two days later the earthquake visited San Francisco there rolled in, from the country round about, a farmer's wagon which slowly and painfully, yet resolutely, wound its way to the store of the Hebrew merchant, and when it reached there the grateful farmer explained that he had come to help his friend with the only means at hand in his last remaining vehicle, to transport the merchant and such of his goods as he could to a place of safety and refuge. The farmer stated that on the way he had been met by scores of people and had been offered extravagant sums of money for the use of his conveyance, but explained that he had carried in his heart a grateful sense of the merchant's kindness to him in his own hour of necessity, and that it was the greatest pleasure of his life to refuse all financial offers for the sake of illustrating his sincerity and grateful appreciation.

# Remington

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1876



1906

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ADDRESS—NEW YORK OR ANYWHERE

# Typewriter



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# BOYS

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**The Guarantee** In every watch will be found a printed guarantee, by which the manufacturers agree that if without misuse the watch fails to keep good time within one year they will repair it free of charge, and return it.  
**DESCRIPTION**—Plain center band, elegant nickel case, snap back, Roman dial, stem wind, stem set, medium size, oxydized movement plate, open face. Engraved front and back.

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## Fashionable Midsummer Clothes



No. 784—Waist with Fichu Bertha

Pattern cut for 32, 34, 36 and 38 inch bust measures. Quantity of material required for medium size, or 36 inch bust, three and three fourths yards of twenty-two-inch material, or two and one fourth yards of thirty-inch material, with one yard of tucking for yoke, cuffs and girde, and two and one half yards of lace for bertha

No. 785—Gathered Skirt—Seven Gores

Pattern cut for 22, 24, 26 and 28 inch waist measures. Quantity of material required for medium size, or 26 inch waist, ten yards of twenty-two-inch material, or eight yards of thirty-inch material



No. 782—Girl's Sailor Suit

Pattern cut for 6, 8, 10 and 12 year sizes. Quantity of material required for medium size, or 8 years, four and one half yards of twenty-seven-inch material, or three yards of thirty-six-inch material, with one fourth of a yard of tucking for the shield



Nos. 784 and 785



Nos. 786 and 787



Nos. 788 and 789



No. 786—Waist with Shoulder Straps

Pattern cut for 34, 36, 38 and 40 inch bust measures. Quantity of material required for medium size, or 36 inch bust, three yards of twenty-two-inch material, or two yards of thirty-inch material, with one yard of all-over lace for trimming

No. 787—Panel Skirt with Plaited Flounce

Pattern cut for 24, 26, 28 and 30 inch waist measures. Quantity of material required for medium size, or 26 inch waist, nine and one half yards of twenty-two-inch material, or seven and one half yards of thirty-inch material, with four yards of all-over lace for panels

**T**HE knowledge of when and how to use trimmings is of special importance to the woman who makes her own clothes. The trimming of a frock may ruin it, or be just the telling point that makes its success.

There are certain materials which require no ornamentation, while there are others that demand it. Take, for example, costume Nos. 784 and 785 illustrated on this page. The material has a large figure for its pattern. It is silk mousseline, scattered with indistinct floral designs which graduate in size from the waist line to the hem of the skirt. The beauty of such a material would be lost if much trimming were introduced. As it is, the full skirt is made perfectly plain, merely finished with a deep hem, while the girde and the cuffs are most inconspicuous. They are purposely planned so, and are made of white tucking and narrow lace insertion. A simple fichu bertha of lace outlines the V-shaped neck. In glancing at this costume, it is the beauty of the material that one sees, and this is just as it should be. If one prefers, the waist can be made with a high neck. Tucking may be used for it to correspond with the girde and cuffs. The pattern shows the lining perforated where it is to be cut for the low neck.

In costume Nos. 786 and 787 it is the trimming and its clever arrangement that gives the gown its *cachet*. The material may be any of the veilings or sheer fabrics, only it should be in a solid color. A pale cinnamon-brown is an excellent shade for such a dress. Coarse, heavy lace, either in *écru* or cream white, is used for the shoulder straps, while a finer lace is selected for the yoke.

The skirt of this dress would have no distinctive identity whatever, if it were not for the pointed and graduated panels of lace. The skirt is made with a plain front panel and circular side portions. These side portions show points at the lower edge where they are seen between the lace panels. The lower part of the skirt is given a charming and fashionable fulness by a plaited flounce.

The waist with its double box plait, back and front, and pointed yoke needed some little extra touch to give it special effectiveness. The shoulder straps with pointed ends supply just this need.

The plain fabric and general style of the gown shown in illustration Nos. 788 and 789, require trimmings—that is, if it is the right trimming—to produce the most artistic effect.

The long, graceful, trailing skirt would be spoiled if a mass of trimming were applied to it. Therefore it is merely laid in clusters of fine tucks and finished at the bottom with a hem and two tucks. The tucks are introduced on the front edge (which is the straight edge) of the side and back gores.

The waist would be the simplest sort of a model, too simple, in fact, for an expensive fabric, if it were not for the trimming. But as it is now, it has the air of an imported waist. The material of the gown may be of *crêpe radium* or *satin radium*. The yoke is of white lace. Outlining it is a band of fine white cloth decorated with small black velvet buttons. The girde fastens in front with tiny



No. 788—Waist with Round Yoke

Pattern cut for 32, 34, 36 and 38 inch bust measures. Quantity of material required for medium size, or 36 inch bust, three and three fourths yards of twenty-two-inch material, or two and one fourth yards of thirty-inch material, with one yard of all-over lace for yoke and cuffs

No. 789—Tucked Skirt—Nine Gores

Pattern cut for 22, 24, 26 and 28 inch waist measures. Quantity of material required for medium size, or 26 inch waist, thirteen yards of twenty-two-inch material, or eleven yards of thirty-inch material

black velvet bows. Silk embroidery decorates the front of the bodice. It is in the same shade as the material of the dress. In addition to the leaves and stems, which are worked with silk threads, there are chiffon roses, which may either match the material in color, or be in some contrasting shade which harmonizes with it, or silk embroidered motifs may be used.

The summer girl who does her own sewing will find the hem-gage illustrated on this page a great convenience. It is a simple little contrivance made of nickel, and costs twenty-five cents. It makes it possible to always have the hem of one's dress absolutely even. The gage is marked off with inches, and is provided with a slide which has a pointed indicator on the outside edge. In the center of the slide is a little point that goes through the holes of the gage at each eighth of an inch. If you wish to have—say a two-inch hem finishing the bottom of your skirt, place the gage on the material, and move the indicator until it is exactly on the two-inch line. The point of the indicator will mark the two-inch hem.

Maybe every outdoor girl doesn't know of the many uses to which a piece of rough pumice may be put. When going off on a summer vacation a bit of pumice stone will not come amiss tucked away in one's trunk or suitcase. A round piece of rough pumice can be bought in a neat little cardboard box for ten cents. It is most useful to remove a callous spot on the foot or hand, and it will take off stains like magic. The woman who does her own housework will also find it most convenient in keeping her hands white and smooth.

Another toilet accessory which every summer girl will like is the tiny lambs-wool powder-puff. That it is washable and grows softer and softer with use are two of its good qualities.



Hem-Gage for turning an even hem

## PATTERNS

To assist our readers and to simplify the art of dressmaking, we will furnish patterns of any of the designs illustrated on this page for ten cents each. Send money to Pattern Department, The Crowell Publishing Company, 11 East 24th Street, New York, and be sure to mention the size and number of the pattern desired.

Our new summer catalogue of fashionable patterns, containing two hundred of the latest designs that will be appropriate for all occasions, is now ready, and will be sent free to any address upon request.





### Wit and Humor



#### Cupid's Festival

**A** CABLE from Brussels tells of the fourth annual cupid festival in the little Dutch town of Ecaussines-Lalaing, Belgium. Two thousand bachelors from all parts of Belgium, many from France, and some from Germany, are said to have gone there to find brides. As there were only ninety-seven marriageable girls in the quaint little place, the supply of matrimonial partners fell deplorably short of the demand. Nevertheless the festival was a big success.

The men began to arrive early in the morning, but it was toward noon before train-loads of them appeared. There were all sorts and conditions of men. One man of seventy-two had traveled all the way from Luxembourg to find a wife, to whom he promised a dowry that would place her beyond want.

At noon the bachelors were formally welcomed at the gates of the village by the Spinster Committee. Last year's president and several members of the committee are now married as the result of festivities twelve months ago, and others had been elected in their place.

All marched to the "Grand Place," where there was an open-air concert. The bands played nothing but nuptial marches and love songs. At the close an adjournment was made to the town hall, where the young women took their places at tables on which stood bowls of pink roses with such mottoes as "Hope on," "Love," "Be trusting" and "Have faith."

A vacant chair was left beside each girl, and at a given signal the men with matrimonial intent made a rush to secure the seats. Then coffee and a sweet cake were



Harper's Weekly

#### FRANKNESS

Amateur Begging Letter-writer: " . . . and dear sir, if you would favor me with the loan of ten pounds I should be eternally indebted to you."—From an unpublished drawing by the late Phil May.

served, followed by a bonbon tasting of licorice. When this was over the woman president made a speech on "The art of pleasing men," which was wildly applauded. Dancing in the open air ended the program of the festivities.

#### Testing Times

(Written while plowing.)

You may talk of great men, of the self-made men  
 Born in an auspicious hour;  
 But that man is great who is calm and sedate  
 When the pesky old plow won't scour.

There are spirits as cool as an unrippled pool  
 Nestled soft in a mountain glen;  
 But I never yet met the man who won't sweat  
 When the pigs break out of the pen.

There are men who don't swear; if their lives were laid bare,  
 You could scarce find a trace of the sin;  
 But oh, what emotions make inward commotions  
 When you bump one of these on the shin!

Quite pious is he who daily can be  
 Much endowed with heavenly grace;  
 But the man is a saint who will make no complaint  
 When the cow kicks the milk in his face.  
 —Walter S. Evans.

#### Wonders of Wooster

Down at Wooster, Ohio, recently a school-teacher who wished to encourage the study of natural history gave out a number of subjects on which she requested her pupils to write essays. "The Sponge," "The Fly," "The Cow" and "The Cat" were some of the things the Wooster eight-year-olds were to write about, and we have pleasure in publishing extracts from some of the interesting papers that were elicited.

"**THE FLY**—The fly is an insect. It is a very sharp little creature. The fly has six legs so as it can climb on the window. We haven't six feet, we can't sleep on the



Mrs. Jones—"My, what a dirty tramp. Why don't you wash yourself?"  
 Tramp—"Out of respect to me poor old mother. When I was a boy she said to me, 'Hang your clothes on the hickory limb, but don't go near the water.'"

top of the ceiling like the fly. The fly has two eyes full of little eyes. It is hard to catch because it can see east and west and both sides. . . . Flies can't eat anything hard. They like sugar. It has a kind of spit, when it eats sugar it drops this spit on, and it softens the sugar, then it sucks it up by the trunk. The fly has no teeth and no nose. It breathes out of its sides. A fly carries its hair brushes in its trunk so as to brush its hair when it gets all mussed up. We can learn quite a few things from a fly. We can learn to brush our hair and face when it gets dirty and keep ourselves clean. There are horse-flies, too, but I never saw a mule fly. HUGH LONG."

"**THE COW**—A man bot a cow. He had never a cow, so he drove the cow home. He was feeding and his wife was milking. The man noticed she did not chu well, so he thout she must be sick. He looked into its mouth and seen she had no teeth, and they was its upper teeth, too. She is not a good cow, he told his wife, I will drive her back to the farm. . . . A cow is good for milk, butter and for shoe-leather and for catts. DOMINIC LUCCI."

"**CATS**—Cats are a little animal. Cats are good to have about the house, they catch mice. Cats have four legs and can climb trees. They could not climb without toe-nails, they has them. . . . Cats have whiskers but not like men's. Cats belong to the cat family. Men belong to some other family. ANTONIO ANTONNUCCI."

One of the boys appears to have jumped the fence, leaving the animal kingdom behind and taking a look at the vegetable kingdom:

"**THE POTATO**—A potato is like a goose-egg. Some are little as marbles, some are as big as a baseball. . . . The skin is



Son—"Why, pop, he said he caught a trout in our creek fifteen inches long. I never knew they grew to be that long."  
 Father—"They do, my son, after the story has been told a few times."

for to hold the juice in. There are three kinds of potatoes, sweet potatoes, Irish potatoes and smashed potatoes. "ANTON PFAFF."

We are forced to the conclusion that some noble work in the way of making fine American products out of foreign raw materials is being done at Wooster.—Chicago Record-Herald.

"Can anyone tell me what a palmist is?" asked the teacher.  
 "I know, teacher. It's a woman who uses her hand instead of a slipper."—Judy.

## Tools That "Handle" Easy

You want tools that give best service and longest wear. Finish is all right—but first, last, and all the time, you want strength, endurance, and proper balance for easiest and most effective use. There is just one way to get such tools—see that every hand implement you buy bears the name

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Every Keen Kutter farm tool has a well-seasoned, straight-grained ash handle. If your dealer does not have them, write us. Tool Book Free.

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"The Recollection of Quality Remains Long After the Price is Forgotten."  
 Trade Mark Registered.



## HEADACHE AND NEURALGIA

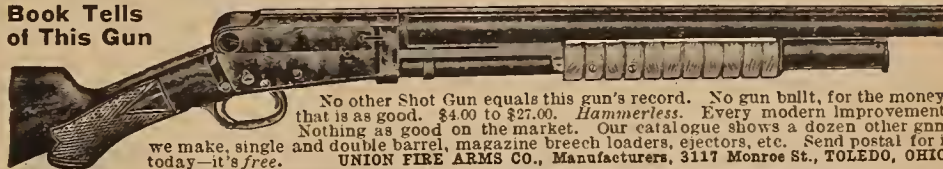
QUICKLY CURED BY USING DR. WHITEHALL'S MEGRIMINE

Write for a trial box—we send it *without cost*. If you suffer from headache or neuralgia, Megrimine is a necessity—the most reliable remedy on the market. Cures any headache in thirty minutes. After one trial you will never be without it. Twenty years of success places Megrimine at the head of all remedies for painful nervous troubles. For sale by all druggists, or address

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## FREE SIX SHOTS IN FOUR SECONDS

Book Tells of This Gun



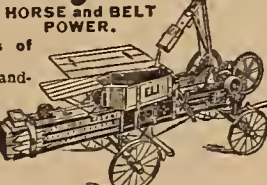
No other Shot Gun equals this gun's record. No gun built, for the money, that is as good. \$4.00 to \$27.00. *Hammerless*. Every modern improvement. Nothing as good on the market. Our catalogue shows a dozen other guns we make, single and double barrel, magazine breech loaders, ejectors, etc. Send postal for it today—it's free. UNION FIRE ARMS CO., Manufacturers, 3117 Monroe St., TOLEDO, OHIO.

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HORSE and BELT POWER.

38 styles and sizes of Presses.

For many years the standard. Lead in character of work, speed, easy and safe operating. Don't buy until you see the Eli catalogue. Mailed free. Write for it today.



GOLLINS PLOW CO., 1116 Hampshire St., Quincy, Ills.

## LAWN FENCE

Many designs. Cheap as wood. 32 page Catalogue free. Special Prices to Cemeteries and Churches. Address COILED SPRING FENCE CO., Box 414, Winchester, Ind.



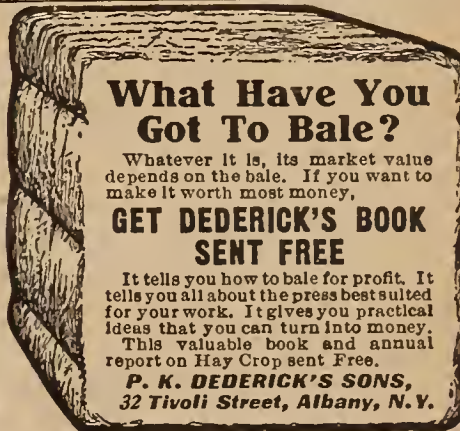
## What Have You Got To Bale?

Whatever it is, its market value depends on the bale. If you want to make it worth most money,

### GET DEDERICK'S BOOK SENT FREE

It tells you how to bale for profit. It tells you all about the press best suited for your work. It gives you practical ideas that you can turn into money. This valuable book and annual report on Hay Crop sent Free.

P. K. DEDERICK'S SONS,  
 32 Tivoli Street, Albany, N. Y.



## No Better Knife Made



PREMIUM No. 415

We illustrate herewith a three-bladed knife which is known as the "Yankee Whittler," and it is a fine knife for general purposes. The blades are of the very best steel, hand forged, and carefully tempered the same as a razor blade. It has good solid handles, nicely trimmed, and it is one of the most serviceable knives we have ever offered. It is warranted by the manufacturers to give the best of satisfaction and to carry a keen edge. Sent prepaid.

This "Yankee Whittler" Knife given free for a club of SIX yearly subscriptions to Farm and Fireside at 25 cents a year  
 Farm and Fireside one year and Knife, post-paid, \$1.00

(To Club Raisers:—When the subscriber pays this special price (\$1.00) you are entitled either to the regular cash commission or to count the name in a club.)

Address FARM AND FIRESIDE, Springfield, Ohio



## Hoosier Steer Gets Into Trouble

SALT led this steer into trouble, and a lack of good steer sense prevented his getting out of it. It took two choppers with sharp axes to liberate him.

The animal in nosing around the pasture, discovered a handful of salt in a hollow tree, and he stuck his head into the opening to lick up the crystals in reach of his tongue. Then the beast discovered that he was in the same fix as the boy who having climbed a tree couldn't work the getting-down combination. The trouble was that the steer would jerk his head upward every time he made a move to get out, but the opening at the top was narrower than below, so he was held in a vice. If he had lowered his head and pulled out as he pushed in he would have been all right.

About the time that he got caught, J. C. Shaver, a photographer, of Monticello, Indiana, came along the highway with his



SHOUGH NOUGH SEE, CHIEF OF THE POTTAWATOMIES

camera, and Mr. Steer was snapped without so much as asking his leave, but then that is a way that the camera fiends have the world over.

Shaver then hurried to the house of the farmer who was supposed to own the animal, and he was soon extricated from his queer predicament. A big chip was chopped out from each side of the opening, and then the animal backed out of his trap. Shaver says he was the maddest brute in all Hoosierdom, and the whole party had to scale a barbed-wire fence in order to save themselves. He bellowed around as if he didn't know whether to blame nature for growing a tree with a hole big enough to get into but too small to get out of, or the idiocy of anyone who would go around salting the interior of such a contrivance. J. L. GRAFF.

## Hatching Fifteen Thousand Eggs at Once

AN incubator with a capacity of 15,000 eggs is told of by the New York "Herald" as having been recently completed by W. P. Hall, Pembroke, N. Y. It is undoubtedly the world's largest incubator. It is one hundred and two feet long and four feet and four inches wide. Partitions divide it into one hundred compartments, each accommodating two trays. The trays have wire bottoms and hold seventy-five eggs each. To fill the incubator a single time with common—not thorough-bred—eggs would require an expenditure of six thousand dollars, for eggs of the requisite freshness would cost forty cents a dozen. As one hen covers fifteen eggs for hatching, the incubator does the work of one thousand fowls, or has the capacity of one hen setting constantly for nearly ten years.

The incubator is heated by means of a coil of eight steam pipes passing over the top of the egg chamber on one side and returning on the other. These pipes are connected, at one end of the structure, to a water-tank and heater. The water flowing through the pipes is heated to exactly the right temperature, a thermostat attached to the stove opening and closing the drafts to make this possible. The only attention required by the heater is supplying it with coal night and morning.

The thermostat is an expansion tank, ten by eighteen inches, which stands over the heater. The tank is filled with oil, in which is a float. As the heat of the furnace warms the water, the water in the jacket surrounding the heater expands and the float in the oil rises. This movement closes a throttle attached to the



flat-arm, and shuts the draft of the heater; another lever at the same time opens the cold-air draft of the furnace. In this way the temperature is regulated automatically with extremely little variation, the eggs being kept at 102 degrees Fahrenheit.

A second novel feature is that the heat of the eggs is regulated in raising or lowering them in the egg chamber, which is nearly a foot high inside, burlap separating it from the pipes. The egg-trays rest on double frames hinged by galvanized arms, or levers. As the chicks develop the trays are lowered on these supports, the first drop being made in six days, and others at intervals, until, on the twenty-first day, the trays are resting on the bottoms of the chambers. All infertile eggs are tested out on the seventh day.

Mr. Hall built small incubators at first, but the bill for forty such incubators, with eight thousand eggs' capacity, was one hundred and fifty dollars for a season, while a large incubator was run three months at an expense of less than eight dollars for coal.

## The "Poor Indian" as He Appears on the Western Reservations To-day

THE Pottawatomies, in north central Kansas, are among the most quiet and peaceful of the Indian tribes. The children in the Indian schools alternate work with study, devoting half of the day to each. The boys are taught all the branches of practical farming, and many useful trades, such as the blacksmith and carpenter trades, broom-making, tailoring, shoe-making and printing. A bright little journal is issued weekly. Each trade is taught in a fully equipped shop of its own. The girls are taught to cut and make their own clothing, as well as housework in all its details. Music is taught, and a number of the students show great musical talent. The Indian band furnishes music for the students' dance every Saturday night. Its proficiency has given it a reputation extending to the adjoining states, and it is frequently engaged as an attraction for special occasions.

A. M. BENSON.

## About Snake River

DR. C. E. CROWLEY, of Idaho Falls, Idaho, writes us in reference to an article, which was published in our July 1st issue, under the caption "Weird Western River," and which was credited to "World's Work." Mr. Crowley says the great Snake River was discovered by the Lewis and Clark expedition while on its way to Oregon. The river was named by them the "Lewis and Clark River," but trappers, who were engaged in pursuit of their game, ignored this name and called it the "Snake River," not because of the superabundance of snakes near its banks, for of them it was remarkably free, but because of the extremely crooked path which it travels in its journey to the sea. The article referred to says that "The few who have tried to follow its winding course through wild and forbidding extents of

lava plateaus, do not wonder that so little is known of it, for no railroads traverse the lifeless desert that borders it, and no boats for hundreds of miles at a stretch, dare ply its waters." Now as a matter of fact, there are settlements along the Snake River almost continuously from its head to its junction with the Columbia River, and in its course it flows through some of the richest soil that can be found anywhere. One has but to consult a map to find that the Oregon Short Line Railroad parallels this river for nearly seven hundred miles. There is perhaps no better land in the West for the production of wheat, oats, potatoes, sugar-beets and other farm products than can be found in the Snake River Valley. As proof of the last statement I give the following facts which I can and will substantiate.

In Fremont and Bingham Counties, near the head of the river, there are three large sugar factories. The one at Sugar City, Fremont County, handled 80,000 tons of beets last year. The one at Idaho Falls, Bingham County, handled over 70,000 tons, and the one at Blackfoot, in the same county, handled over 30,000 tons the same year. In 1905 over 3,000 carloads of farm produce was shipped from the Idaho Falls station, and this is only one of the many shipping points in this part of the valley. The writer, last year, produced 657 bushels of wheat on twelve acres that had been in grain for four successive years and had never been manured, and this was no extraordinary year for grain either, neither was mine an extraordinary crop yield for this valley.

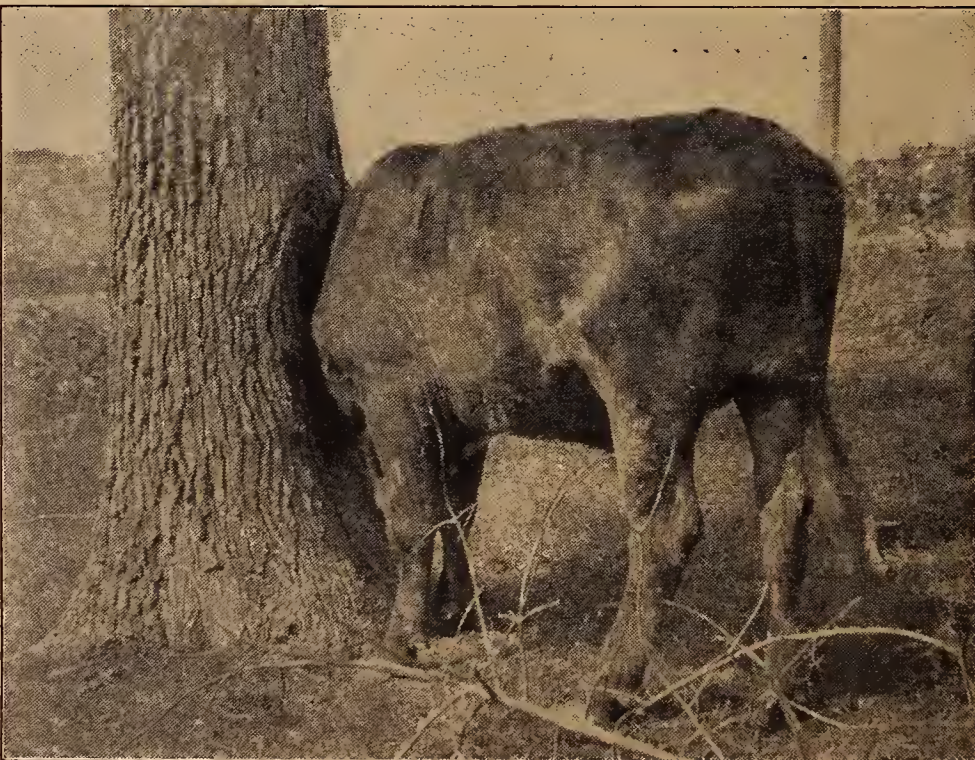
It is true that most of this country would be a desert were it not for our system of irrigation. We regulate our rainfall by means of a headgate, and in twenty years of my personal experience I have never known a failure of crops in Idaho.

At intervals in its course the river does plunge over cliffs, and passes short stretches of "wild and forbidding lava plateaus," but it is only to get to the broad level valleys found after the gorges are passed.

Our friend who wrote the article in "World's Work" evidently did not look up the statistics, or keep pace with current events, for if he had, he would have found what I have written above to be true, and further would have found that Uncle Sam has, in course of construction, some of his greatest works in the line of the reclamation of the arid lands of the great West located on the "Weird Western River."

## The Flag's New Stars

THE impression seems to prevail in some quarters that because Congress passed and the president signed a bill intended to bring two new states, Oklahoma and Arizona, into the Union, the federal circle has been actually enlarged, and two new stars will have to be added to the flag on July 4th last. Newspaper readers who recall that Congress permitted the territories of Arizona and New Mexico to vote separately next November on the question of consolidation have not fallen



ODD PREDICAMENT OF A HOOSIER STEER

into this error. Yet they may think that because no opposition to amalgamation exists in Oklahoma and Indian Territory the new state of Oklahoma is already virtually created. This is not the fact, however, for there, as well as in the proposed commonwealth of Arizona, many formalities are still to be observed before admission into the Union is accomplished.

The act passed by Congress was an enabling act. It set in motion machinery through which the people of the territories affected might declare their wishes and purposes. In the case of Arizona and New Mexico an affirmative vote on the proposed merger must first be given by each territory. This question will not be submitted until next November. In the case of Oklahoma and Indian Territory the present territorial governments are to make an apportionment for the election of delegates to a constitutional convention. This body is to have one hundred and eleven members. It must be elected



POTTAWATOMIE SQUAW, SWIFT ELK, THE CHIEF'S WIFE

within the next six months, and will probably be chosen some time this summer. The convention will frame a constitution and submit it to the voters, who at the same time are to vote for state officers and for representatives in Congress. Oklahoma is to have five representatives until after the next national reapportionment. It is not unlikely that this state and congressional election will be held in November. If a majority vote is given for ratification, the results of the election will be canvassed and forwarded to Washington. If they are found correct in form, and if the terms of the enabling act have been complied with, the president within twenty days thereafter must issue a proclamation declaring the new state admitted on an equal footing with the other states.

Oklahoma will doubtless become a state before the end of the year. If Arizona and New Mexico vote in November to unite, they can be organized into a commonwealth next winter or spring. By law the new star on the flag representing a new state must be added on the Fourth of July next following admission, so that no charge was necessary in 1906. On July 4, 1907, one new star is pretty certain to be sewed on, making forty-six. New Mexico and Arizona by consolidating can bring the total next year or the year after up to forty-seven.—New York Tribune.

## By the Terms of the Will

A STORY is told of a dying gentleman, who left his estate to a monastery on condition that, on the return of his only son, who was then abroad, the worthy fathers should give him whatever "they should choose." When the son came home he went to the monastery, and received but a small share, the wise monks choosing to keep the greater part for themselves. The young man consulted his friends, and all agreed that there was no remedy. At last a barrister, to whom he happened to mention the facts, advised him to sue the monastery, and promised to gain his case. The gentleman followed his advice, and the suit terminated in his favor through the management of the advocate, who grounded his plea upon this reasoning:

"The testator," said the ingenious barrister, "has left his son that 'share of the estate which the monks should choose;' these are the express words of the will. Now, it is plain what part they have chosen by what they keep for themselves. My client, then, stands upon the words of the will. 'Let me have,' says he, 'the part they have chosen, and I am satisfied.'"



# MADISON SQUARE PATTERNS

New Summer Catalogue of Madison Square Patterns Sent Free Upon Request

Order all Patterns from Pattern Department, The Crowell Publishing Co., 11 East 24th St., New York City

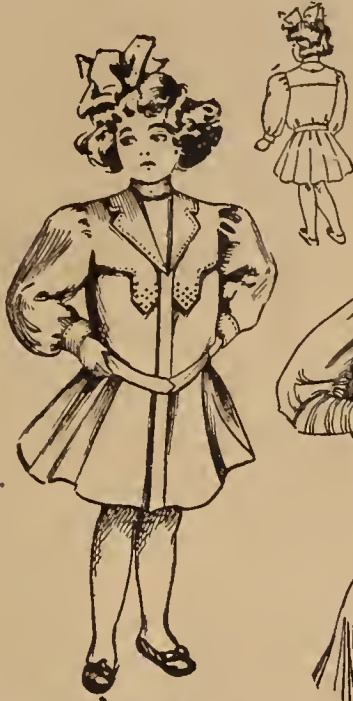
FULL DESCRIPTIONS AND DIRECTIONS—as the number of yards of material required, the number and names of the different pieces in the pattern, how to cut and fit and put the garment together—are sent with each pattern, with a picture of the garment to go by.



No. 728—Plain Low-Neck Nightgown  
Sizes 34, 36, 38 and 40 inch bust measures.  
10 cents.



No. 705—Dressing Sack with Fitted Back  
Sizes 34, 36, 38 and 40 inch bust measures.  
10 cents.



No. 707—One-Piece Russian Dress with Applied Yoke  
Sizes 4, 6, 8 and 10 years.  
10 cents.



No. 695—Tucked Shirt-Waist  
Sizes 34, 36, 38 and 40 inch bust measures.  
10 cents.



No. 772—Waistcoat Shirt-Waist  
Sizes 32, 34, 36 and 38 inch bust measures.  
10 cents.



No. 749—Princess Petticoat  
Sizes 36, 38, 40 and 42 inch bust measures.  
10 cents.



No. 2020—Baby's Set  
One size only. 15 cents.



No. 627—Plain Princess Wrapper  
Sizes 34, 36, 38, 40 and 42 inch bust measures.  
10 cents.



No. 647—Russian Suit with Yoke  
Sizes 2, 4 and 6 years. 10 cents.



No. 645—Lingerie Waist with Simulated Bib  
Sizes 34, 36, 38 and 40 inch bust measures.  
10 cents.



No. 646—Yoke Shirt-Waist  
Sizes 34, 36, 38, 40 and 42 inch bust measures.  
10 cents.



No. 722—Tucked Shirt-Waist  
Sizes 34, 36, 38 and 40 inch bust measures.  
10 cents.



No. 451—Combination Waist and Drawers  
Sizes 1, 2 and 4 years.  
10 cents.



No. 674—Empire House-Gown  
Sizes 32, 34, 36 and 38 inch bust measures.  
10 cents.



No. 720—Boy's Sailor Suit  
Sizes 6, 8 and 10 years. 10 cents.



No. 685—Box-Plaited Play Dress  
Sizes 2, 4, 6 and 8 years. 10 cents.

Have you seen our Catalogue?

## ALL PATTERNS 10 CENTS EACH

When ordering be sure to comply with the following directions: For ladies waists, give BUST measure in inches. For skirt patterns, give WAIST measure in inches. For misses or children, give age in years. To get BUST and BREAD measure put tape measure ALL of the way around the body, over the dress, close under the arms. Order patterns by their numbers. Satisfaction guaranteed or money refunded.

**FREE** We will give any THREE of these patterns for sending TWO yearly subscriptions to FARM AND FIRESIDE at the regular price of 25 cents each. When ordering "write your name and address distinctly."

We will send FARM AND FIRESIDE One Year, new or renewal, and any ONE pattern for **Only 30 Cents** For other new and up-to-date designs see page 20



**Agricultural News Notes**

Carlisle, in Lonoke County (the prairie region of Arkansas), is said to be the greatest dairy producing point in the South.

The sugar-beet industry is well established in Colorado. Over twenty-one thousand more acres are being grown than last year.

The State Agricultural College of Colorado, at Fort Collins, has established a school of forestry, with Dr. W. C. Sturgis as dean.

In France there are several million farms that are not over six acres in extent, which are profitably cultivated by their contented owners.

**Advice to Advertisers**

(From an address on advertising by F. D. Coburn, Secretary of the Kansas State Board of Agriculture, at a banquet given to six hundred advertising men at the Auditorium Hotel, Chicago, by White's Class Advertising Company.)

If I ventured to advise the advertiser the advice would be largely "don'ts," and something like this:

Don't expect too much. Advertising may seem to work miracles in some instances, but miracles are exceptions and not the rule.

Don't lie. Live up to your announcements.

Don't indulge in flapdoodle, and don't slop over.

Don't be stingy in your appropriation.

Don't be brusque, gruff, "smart" nor exacting with the solicitor. He may be fully as much of a gentleman as yourself, and if he is not you have a fine opportunity to show him an example of a true gentleman's behavior.

Don't try to tell too much in a small space. Give your announcement daylight and breathing room. A stuffed advertisement is liable to have a short reach.

Don't overlook the value of well-made, well-printed, convincing illustrations.

Don't publish yourself as "cheap," doing a cheap-John business, by using "cheap" stationery.

Don't fail, if not located at a well-known point, always to announce your direction and distance from some well-known point, and the railroads that reach you.

Don't forget the value of the short and friendly reading notice.

Don't forget that they cost the publisher money.

Don't demand something for nothing, especially long-winded puffs of yourself and what you have. Pay your way, and pleasantly: the prompt payment is doubly sanctified. The haggler, the skinflint, the knocker and bluffer may carry his point at times, but in the long run he will lose out—in standing if not in money.

Don't, if the publisher makes an error, of commission or omission (and these errors are common to most of us), try to regulate him by rudeness until other means have failed. He may know how to be quite as rude as you, and, besides, he has a club. There are few instances in which a publisher is not glad to rectify in good measure any mistakes for which his office is responsible.

Don't drop out. Keep something doing. Change your copy and stay alive.

Don't forget to award the other fellow the same square deal you ask for yourself.

**Catalogues Received**

Anderton Mfg. Co., Cincinnati, Ohio. Illustrated catalogue of vehicles and harness sold direct from factory to user on thirty days' trial.

J. Stevens Arms & Tool Co., Chicopee Falls, Mass. Handsome hanger in colors.

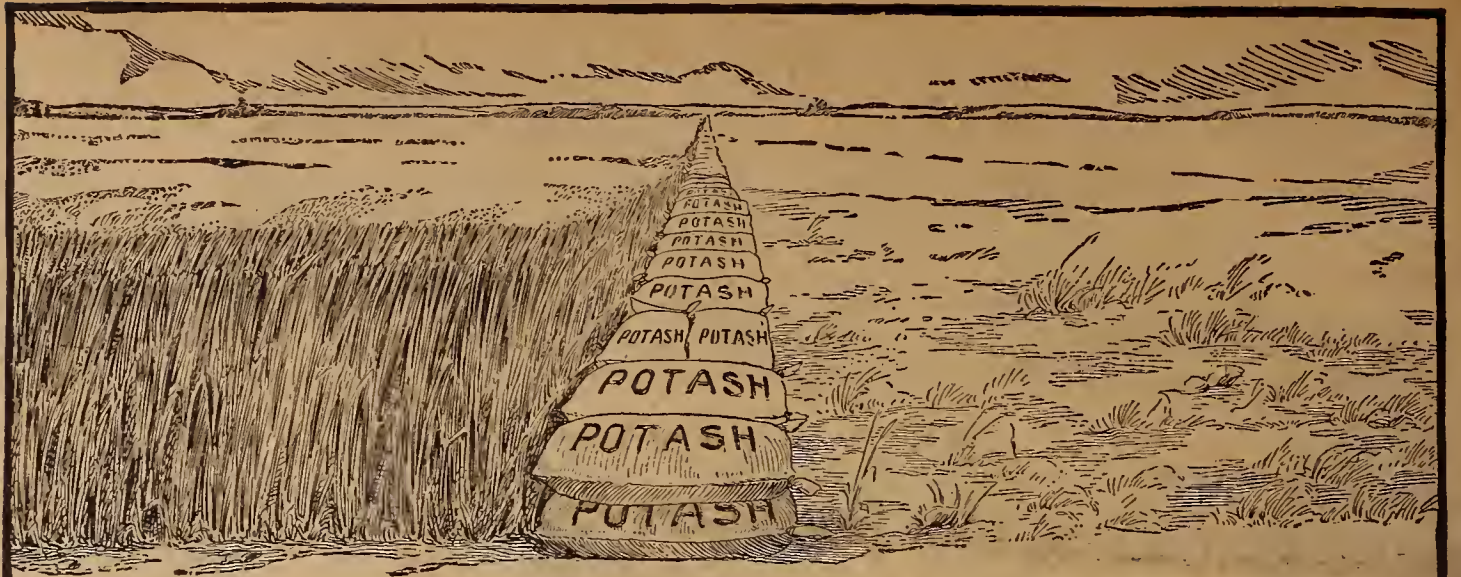
F. A. Thompson & Co., Detroit, Mich. Descriptive circulars of pure nicotine extracted from tobacco for killing all insect pests on plants, fruits, fowls and domestic animals.

W. C. Garrard, Springfield, Ill. Premium list of the Illinois State Fair, Springfield, September 28-October 5, 1906.

Lewiston-Clarkston Co., Lewiston, Idaho. Illustrated pamphlet "Grape Culture in the Lewiston-Clarkston Valley."

Cutaway Harrow Co., Higganum, Conn. Illustrated pamphlet describing the celebrated Clark's Cutaway disk harrows. Cutaway disk plows, combined Cutaway seed-drill and plow, etc.

Madison Cooper Co., Watertown, N. Y. Chart of approved temperatures for different products in cold storage. Price, 25 cents, but free to bona-fide cold-storage plants.



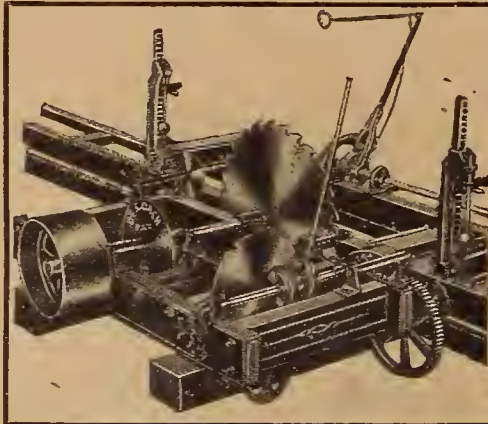
The difference between good and poor wheat crops is caused by

**POTASH**

A fertilizer is not complete unless it contains ample Potash; anything short of that gives poor yields. Wheat cannot thrive on food lacking that element which it most needs, consequently, a fertilizer lacking the necessary Potash starves your grains. Farmers are realizing these facts more and more. They are enriching their soil at the Fall planting with Potash, and reaping better and more profitable yields.

Our books on farming are sent free on request, to show you how poor farms have been made to pay, and how good farms have been made better. There isn't a farmer in the country who can read them without profit.

GERMAN KALI WORKS, 93 Nassau Street, New York



**SAW MILLS**

Original DeLoach Patent

Variable Friction Feed, and Friction Set Works

In sizes to suit any demand

Do not buy a Cheap Imitation

Get the Real Thing - Get a DeLoach

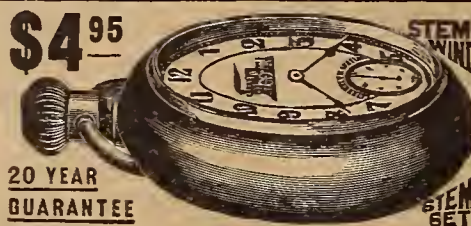
SAVE WORRY - SAVE MONEY

Make better lumber, more of it at the

Least Cost.

Write for catalogue of Saw Mills, Shingle Mills, Edgers, Lath Mills, Corn Mills, Water Wheels, etc.

DeLOACH MILL MFG. COMPANY, Box 300, Atlanta, Georgia.



\$4<sup>95</sup>

20 YEAR GUARANTEE

**THE LOCOMOTIVE SPECIAL**

Engraved "23 JEWELS ADJUSTED" A perfect timekeeper. Locomotive on dial and works. Genuine jewels in all important working parts. Fancy ornamental imitation jewels in gold settings on top plate, giving it the appearance of the genuine 23 jeweled watches that sell for \$25 to \$50. Solid case. Silver dust proof screw case, guaranteed for 20 years, both case and works. SEEING IS BELIEVING. Cut this out and send it to us with your name, post office and express office address and we will send the watch to you by express for examination. You examine it at your express office and if as represented pay express agent our bargain sale price \$4.95, and express charges and it is yours. Order to-day as this advertisement will positively not appear again. R. E. CHALMERS & CO., 356 Dearborn St., Chicago.

**Complete Assortment of Fine Needles**

With Decorated Horseshoe Needle-Case

Every woman will appreciate this useful and handsome article. The case is handsomely decorated in colors.

Its general shape is that of a horseshoe, hinged at the base of the shoe. The back also has a design in colors. Open, this case measures 9 inches long by 4 1/2 inches wide.

On one side there are three needle-pockets, containing sizes 3, 5, 6, 7 and 9 of the finest imported needles. On the other side is an assortment of fifteen fancy needles, including a square-end bodkin 2 1/4 inches long, two large darning needles, each about two inches long, and twelve fancy large and small eyed needles. All of these needles are Sharp's Best Ellipse Silver-Eyed. The eye is so shaped as to be threaded with the greatest ease; has no sharp edge to cut the thread. Another valuable feature is a groove shape given to the end of each needle at the eye, so that the thread will follow the needle through any cloth, heavy or light, without the slightest strain. Sent prepaid.

The Needles and Needle-Case will be given FREE to anyone for a club of TWO yearly subscriptions to Farm and Fireside at the regular subscription price, 25 cents a year.

The Needles and Needle-Case, and Farm and Fireside ONE year, sent to any address for only 40 cents.

ADDRESS FARM AND FIRESIDE, SPRINGFIELD, OHIO



Outside View of Needle-Case

Very much reduced in size.



Our Gem Hay Press is the strongest and most efficient press you can buy. It weighs 2600 pounds, while presses of this size by some other makers weigh only 1500 to 1800 pounds. Is it any wonder such presses are continually breaking down and require constant expense for repairs? Our aim is to make the lightest press consistent with good service. Every part is made amply strong for the work it is called upon to do.

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The feed opening is thirty inches, the plunger travel is thirty-eight inches, rapid at the beginning and slow at the end of the stroke, making it easy for the man to put in large charges and have plenty of time to do it. It is such points as this which give our machines an average capacity of 10 to 15 tons a day and frequent records of 18 or 20 tons day after day with the same men and horses.

Our Hay Press Book tells what our machines do, and we would like you to read the testimonials of those who have used them.

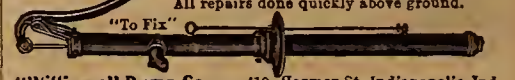
Our nearly forty years experience and constant improvement of our presses is back of our guarantee. Ask anyone who has ever used one of our presses, or who has ever had dealings with us what he thinks about our presses and our methods of doing business.

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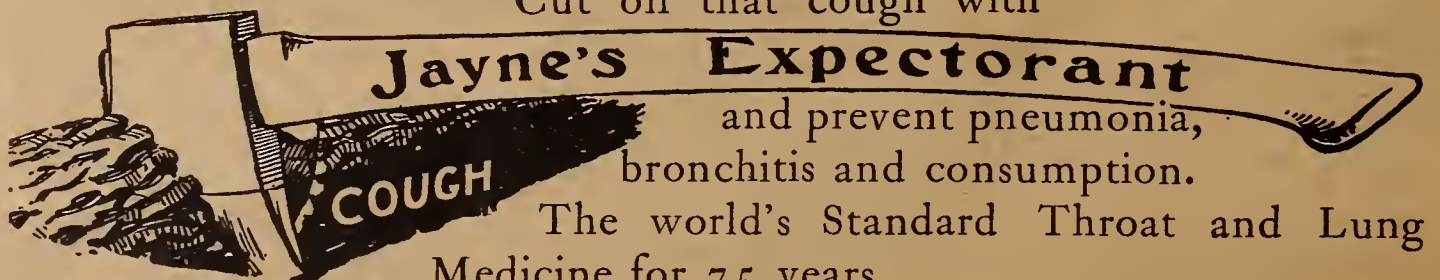
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### The Chemical Action of Fertilizers

**A** FERTILIZER is a simple or compound body which serves to render the soil more fruitful. It acts in one of two ways: As a chemical agent, itself a feeder of the plant, or as a mechanical force, to cause the soil to act. Both methods of action are of very great importance.

The phosphates, carbonates and nitrates are feeders, while sand, clay and gypsum are mechanical agents. Certain elements, like carbon and silicon, are very important in vegetable life, and yet wholly unavailable in their simple state. Carbon, for example, is pure in the diamond, and almost pure in charcoal, lampblack and animal and vegetable oils. In that solid condition it could never enter the vegetable structure, but in the form of carbonic acid gas, which is a compound of carbon and oxygen, it is taken in by both the roots and the leaves of vegetable bodies. It enters the leaf from the atmosphere, of which it constitutes from the twenty-five hundredth to the twelve hundredth part. The leaf is provided with a breathing ar-

Humus is rich in carbon not yet combined with oxygen, but in a process of combination called rotting.

The process of decaying is the same in kind as the process of burning, the difference being a matter of speed. A pile of straw that burns simply decays more speedily; or one that rots, simply burns more slowly. Both burning and rotting are means of uniting the carbon of the straw with the oxygen of the air. When wood is burned, the black residuum that is called charcoal is only a portion of the carbon that becomes cooled before uniting with the oxygen. The black smoke over a fire is the same thing, and lampblack is that portion of the smoke arrested and cooled. Now charcoal and lampblack are both easily consumed, and both are the same as the black matter in humus, or very rich soil.

The tendency of the carbonic acid gas formed by burning or rotting is to leave the body and mix with the air; and there is enough of it supplied to the air from the fires, the breathing of animals and the decay of organic matter to provide all the carbon needed in the vegetable world in process of growth.

maturing of fruits. It is supplied through the roots, dissolved in water; and phosphate of lime is its chief source. This is the form it assumes in the bone fertilizers.

Nitrogen is not a solid, but niter, our common saltpeter, is; and this element is abundant in the flesh, horns and hoofs of animals, also in liquid manures. As it is requisite for muscular growth, the plants must contain it and supply it as food to animals. So certain pastures, rich in nitrogen, are encouraged, such as clover, cow-peas, alfalfa, etc.

As nitrogen is a light gas and not much inclined to combine with other bodies, it is a problem to retain it in the soil, which means to prevent its escape into the air. It goes off in ammonia from manure heaps—and heavy is the loss. Common red or yellow clay is the best known absorbent; and the manure heap is rendered doubly valuable by a liberal coating of clay.

Lime, as a chloride, is an important element in the bones of animals. It is taken in in solution from the soil, and appears with the silicon and potash as a portion of the ashy residuum after burning.

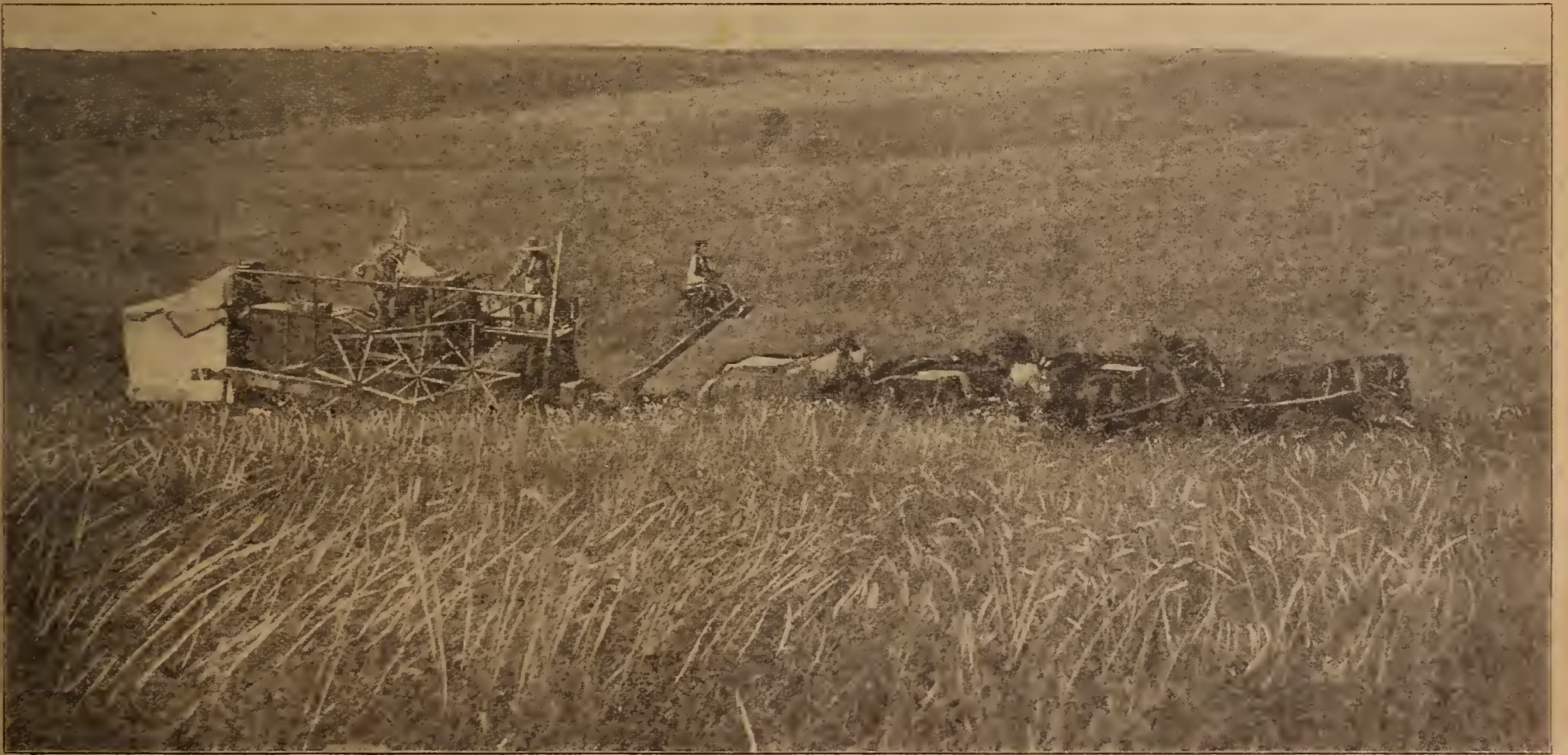
There are several compound elements

### Special Education Essential

**I**T HAS been well stated that "new occasions teach new duties." The fact is, old things are passing away, and all things are becoming new. We are on the threshold of new endeavors in respect to agriculture as well as other occupations.

The new way in agriculture is through thorough and practical educational methods. Science is now the acknowledged handmaid of agriculture. It is yearly becoming more and more difficult for a boy to become a farm-owner, or even an expert farmer, by following the methods in practice before the introduction of improved agricultural machinery and the use of commercial fertilizers. It will not do at the present time for any young man, without special study and practice, to hope that he can work himself up from the position of a common laborer to that of an expert farmer, and make the farm pay except by adopting progressive educational methods.

The first step for any young man to take is that of acquiring as good a preliminary education as can be obtained in



HARVESTING WHEAT IN THE FAR WEST

angement on its under side, through which this gas finds ready entrance. In the leaf is a chemical laboratory wherein the gas is disintegrated, and the oxygen is set free to pass off with the vapor of water from the upper side. The carbon thus freed is carried down in the circulation as soluble starch, and deposited as vegetable fiber.

The root fibers are provided with an arrangement for taking in water from the soil. This water has in solution a larger proportion of carbonic acid gas than there is in the atmosphere above ground, for the reason that the air circulating in the soil is more highly charged. Water is a very ready absorbent of this gas, and it takes it freely while forming in the soil. This is one of the reasons for supplying humus.

Silicon is another element of importance that must first be reduced from its solid state (flint or glass) before the vegetable can receive it. Uniting with oxygen it becomes a gas, and the gas is soluble in water. Thus reduced, it enters by the root fibers with the water and the circulation carries it to the right place—the surface of the stalk of wheat or corn or other grass. On the cabbage palm, of Madagascar, this glassy coat is so thick and heavy that it turns the edge of an ax; and our bamboo and cane will do the same for the edge of a knife.

Phosphorus is a vital element in the brain, nerve fibers and the bones. It is present in the kernels of wheat and corn and in every kind of seed. So there is absolute necessity for this element in the

in the animal body, such as we call protein, albumen, etc.

The blood contains iron, potash, gluten lymph, etc, and all these must enter the body from vegetable and animal foods and drinks. David said no small thing when he exclaimed, "I am fearfully and wonderfully made."

By way of conclusion, let me say, the animals must live off the minerals. There are but few mineral elements, such as lime and salt, that are available in their own kingdom. They must enter (by the roots and leaves) the vegetable kingdom before they are at all suitable for animal food. So the marvelous processes of chemistry must be enacted in the soil to make a way from the mineral to the animal kingdom.

WALTER S. SMITH.

our public schools. This will place him on the vantage ground for future progress. Then should follow special education in the state agricultural college; this to be in the line of his bent, whether it be that of progressive agriculture or special training in some mechanical pursuit. The day for vaulting unprepared into positions that command high salaries has passed away never to return. An education to do whatever is to be done by the most approved modern methods is the demand of the hour.

Any young man having a good education of the kind indicated, can now enter upon his life-work with almost the absolute certainty of attaining ultimate success in any occupation for which he is thoroughly fitted.

W. M. K.



# FARM AND FIRESIDE

PUBLISHED BY  
THE CROWELL PUBLISHING CO.  
SPRINGFIELD, OHIO

Subscriptions and all editorial letters should be sent to the offices at Springfield, Ohio, and letters for the Editor should be marked "Editor."  
Letters regarding advertising should be sent to the New York address.

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The above rate includes the payment of postage by us. All subscriptions commence with the issue on press when the order is received.

Subscribers receive this paper twice a month, which is twice as often as most other farm and poultry journals are issued.

Payment, when sent by mail, should be made in Express or Post Office Money Orders, Bank Checks or Drafts. When none of these can be procured, send the money in a registered letter. All postmasters are required to register letters whenever requested to do so. Do not send checks on banks in small towns.

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Postage Stamps will be received in payment for subscriptions in sums less than one dollar if for every 25 cents in stamps you add a one-cent stamp extra, as we must sell postage stamps at a loss.

When money is received, the date will be changed within four weeks, so that the label will answer for a receipt.

When renewing your subscription, do not fail to say it is a renewal. If all our subscribers will do this a great deal of trouble will be avoided. Also give your name and initials just as now on the yellow address label; don't change it to some other member of the family; if the paper is now coming in your wife's name, sign her name, just as it is on the label, to your letter of renewal.

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Always give your post office at the beginning of your letter.

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FARM AND FIRESIDE does not print advertisements generally known as "readers" in its editorial or news columns.

Mention FARM AND FIRESIDE when you write to our advertisers, and we guarantee you fair and square treatment.

Of course we do not undertake to adjust petty differences between subscribers and honest advertisers, but if any advertiser should defraud a subscriber, we stand ready to make good the loss incurred, provided we are notified within thirty days after the transaction.

## Comment

### Tax Dodging

A FEW weeks ago the Supreme Court of Ohio declared the Morgenthaler, or tax-inquisitor, law unconstitutional. After many years of unsuccessful efforts with Ohio legislatures the tax dodgers have won a victory—a first-battle-of-Bull-Run victory.

In a recent address before the State Bar Association, Attorney-General Wade Ellis said that there are indications that Ohio is worse than any other state in the concealment of property from taxation, and he gave the following figures:

Last year all the corporations in the state returned personal property aggregating only \$300,000,000, while the market value of their stocks was over \$1,000,000,000.

Last year the bank deposits in the state reached \$400,000,000, but only \$60,000,000 was listed for taxation, and other forms of personal property not so easily concealed were doing pretty well at the concealment business. Merchant stocks were listed last year at only \$41,000,000, while in 1875 they were \$11,000,000 more than that.

This was the condition of affairs under the Morgenthaler law that was enforced with some degree of success, as many "caught cheats" know by experience. What will be the condition in Ohio without any tax-inquisitor law? More tax dodging than ever, and more shifting of taxation over on farm-owners and home-owners. What is to be done about it? Place on the statute books a law constitutional in every technical particular, more drastic than the Morgenthaler law, and enforce it. And it will be done.

As a striking example of tax dodging

take the case of Marshall Field, Chicago's merchant prince, the largest individual taxpayer in the United States, and a man of the fairest reputation.

The Board of Review recently demanded from his estate the payment of \$1,800,000 back taxes, largely due on personal property concealed from taxation during the past seven years. The reviewers found that within that time he had paid taxes on \$17,000,000 personalty, and escaped on \$105,000,000.

### Raw Phosphate Rock

The Ohio and Illinois Experiment Stations have undoubtedly solved an important problem in increasing soil fertility by determining that finely ground, raw phosphate rock ("floats") is the most economical form of phosphorus to buy and use on soils deficient in that particular element of plant food. "Floats," as rich in phosphorus as steamed bone, cost only one third the price of the latter, which is about \$25 a ton. To be made available, or soluble, however, the raw phosphate must be used in combination with decaying vegetable matter.

In an Illinois Experiment Station bulletin on experiments in soil treatment, Professor Hopkins says:

It now seems evident that by proper use of large amounts of raw rock phosphate with decaying vegetable matter the soil can be more rapidly enriched in phosphorus, at less expense and with greater increase in net profits than with steamed bone.

The method of applying the rock phosphate may vary under different conditions. It may be sprinkled over the manure from day to day as it accumulates in the stable or feeding shed, at the rate of about one hundred pounds of rock phosphate for each ton of manure; or it may be sprinkled over the manure as it is being loaded on the wagon or manure spreader; or it may be spread broadcast on the land and plowed under with stable manure or clover or cow-peas, or other organic matter. If the ground could be disked before being plowed, and the phosphate and organic matter thus mixed with each other and the soil, it would doubtless be an advantage.

There is the method in a nutshell. And it is in perfect harmony with nature's own method. Nature slowly makes the phosphorus and potassium in the soil soluble, and therefore available for plant food. Man, by cultivation, and by adding organic matter, makes nature work faster. Now raw rock phosphate applied to land supplied with humus—the very life of the soil—will be made available in exactly the same way the original store of phosphorus was prepared for the plants by nature. Nature makes her own superphosphate, and does not have to pay tribute to the fertilizer trust.

### Expert Opinion on Life-Insurance Reform

A special committee of the New Jersey Senate has been investigating the life-insurance companies having headquarters in New Jersey with some interesting results. The investigation disclosed wide differences in the business methods used by different companies, and quite opposite attitudes assumed by company officials toward policy-holders. Some officers run the business solely in the interests of the policy-holders; others mainly in the interest of the management and the stockholders.

In his testimony, United States Senator Dryden, president of one company, claimed that the matter of campaign contributions was none of the policy-holders' business; on the contrary, President Frelinghuysen, of another company, expressed his belief that the policy-holders, whether in a mutual or stock company, have positive rights in the assets and earnings of the company.

In answer to a question by the committee if he had any suggestions to offer relative to an improvement in existing insurance conditions, or a change that might prevent a recurrence of the abuses recently disclosed, Mr. Frelinghuysen said:

I have formed an opinion which, without being presumptuous, I think would cure most of the evils complained of:

First, a strict adherence to the rule of paying all dividends annually.

Second, a specific statement to each policyholder of the value of his holdings, as repre-

sented by his share of the earnings, savings and other matters affecting the company.

Third, a full report of all purchases and sales, as required by one law growing out of the Armstrong investigation.

Fourth, an absolute prohibition of the participation of officers of the company in the profits of its investments or other financial transactions.

In this opinion Mr. Frelinghuysen has given life-insurance reform in a nutshell. Genuine life insurance is absolutely free from all speculative investment and private graft features. The opinion is sound, brief and comprehensive, and is a safe guide for policy-holders to follow in reforming the companies that need reform. The companies now doing business on the principles named are the only safe ones to insure in. Let the policy-buyers beware.

### To Our Readers

The plan of carrying only reliable advertising in a paper is best for the readers, for the advertisers and for the publishers. It makes it safe for every reader to do business with every advertiser in the paper. It places the honest advertiser in good company, with an endorsement that brings him quicker and larger returns. It enhances the permanent value of the publisher's property by gaining and holding the full confidence of subscribers and advertisers, and making the paper worth more to both.

The best paper for the readers is one that carries good advertising as well as good reading. The advertising columns of such a paper are really valuable news columns. They not only tell the readers where to buy necessities and comforts for the home and supplies used in their occupations, but also keep them informed about the latest inventions and improvements for saving labor and increasing the output of their work, whether farming or manufacturing. Many a man who has made a profitable investment in some new or improved machine first learned about it from the advertising columns of his paper, and the information was worth to him many times the subscription cost of the paper for a lifetime.

The publishers of FARM AND FIRESIDE are taking special care not to admit any fraudulent advertising to its columns. We believe that our advertisers are trustworthy, and that they treat their patrons fairly. Therefore, we ask you to read carefully all the advertisements in the paper, and write to every advertiser who offers anything that interests you. It is not possible for the advertisers to tell all about their goods within the limits of the space taken by them in the paper, but, on application, they will send circulars or pamphlets that give full information.

Bear in mind this point, often overlooked, important to yourself, to the advertiser and to us: Whenever you write to one of our advertisers be sure to tell him that you saw his advertisement in FARM AND FIRESIDE, and we guarantee you square treatment.

*J. C. Barnett.*

### Rubber Investments

SOME time ago I received a number of circulars urging me to buy a few shares in an incorporated company then "working" rubber plantations in Mexico. Of course, I pay no attention to schemes of this kind. The following is quoted from the editorial columns of the "Rural New Yorker":

A few years ago certain Mexican rubber companies were boomed with very plausible arguments. None of them seems to have prospered, though some paid so-called dividends out of their capital for a time in order to sell stock. Better let rubber alone! It is said that there is a plant growing in Colorado which contains rubber. A practical man who has spent some time experimenting with this plant says in the mentioned paper: "I cannot advise anyone to invest in the business at the present stage of development. People who cannot go and make personal investigation would better let it alone . . . At present I do not consider either the culture of the plant or the extraction of rubber from the wild plant a paying proposition, although there is a small amount of rubber in the plants."

I believe that our common milkweed also contains a small quantity of a substance resembling rubber. But the advice

to farmers, or any small investors, to "let rubber alone" is good, and might profitably be extended to many other things which form the basis of speculative development companies. Instead of getting rubber, you will get robbed.

### A Storm that Clears the Atmosphere

From whatever point of view we may look upon the recent revelations in the meat-packing business, it seems to me that we all must concede that they have the wholesome influence and effect of the thunder-storm which clears and purifies the air. It is unquestionably true that the great majority of people all over the country had become careless about the things that they eat, not only in meats, but in fruits and vegetables as well. People gradually drift into habits of slovenliness, and into unclean practises, and it takes such sensational revelations and reports, whether overdrawn or not, to arouse us to a realization of the true state of affairs.

The reports as they come from the packers' establishments, I fear, do not tell the whole story. There are unclean and unsafe practises elsewhere, and we may find them, for instance, in our own cow stables, in milking and the handling of milk; we may find suspicious things around our own wells and cisterns, and in many other places. For a while, at least, many persons, not only in America, but in the whole civilized world, will be apt to look more closely than before to the source and character of their food, especially their meats, avoid or reject the things not free from suspicion, and especially partake less freely of animal foods, and in this way steer clear of many risks and dangers. To all of us these impressive and forceful reminders come useful from time to time, like the storm that clears the atmosphere.

*T. Greiner.*

### About Work in Hot Weather

THIS is the time of year to clean up about the place, especially to clear all weeds, brush and other trash out of the corners and along the fences. But it is not necessary to select the hottest days for this work, as seems to be the rule on some farms. If the weather is hot, one should get at this work as early as possible in the morning, drop it as soon as the temperature gets high, then take another crack at it in the evening.

A thoroughly good farmer once told me that he never did any hot work on a clear, hot day, because he could not stand the sun between nine in the morning and four in the afternoon. He got in three good hours in the morning and three in the evening, and generally managed to do about as much as people who worked all through the hottest part of the day. The fact that he was prosperous indicated that his practise was good. Many of us might have so much work on hand that it is necessary for us to work more hours to get it done, but I have never found much difficulty in so arranging it that one may take advantage of cool days and the cooler parts of hot days.

There is scarcely an old farmer living who does not now think many times he needlessly and foolishly exposed himself to sunstroke or other serious injury by doing work that might just as well have been done at some other time. The man who does this must suffer for it sooner or later, and it is sure to impair his usefulness in his later years, when he should be in his prime. In the old days when we farmed with clumsy, crude, "narrow-gage" implements, we used to think that it was necessary to work, rain or shine, to get crops in or out. But with the improved implements of the present day we can accomplish so much more in a given time that it is not necessary to be out in all sorts of weather. Then we have vastly more time to keep the farm in good shape, the fences up and the weeds and trash down. At least we have if we are not trying to do two or three times as much as we should, or can.

*Fred Grundy*



About Rural Affairs

Belated Efforts in Planting Strawberries

THE easiest way of starting a plantation of strawberries in the home garden is to set young plants in early spring, the earlier the better. Of course, the ground must be rich and well prepared. A new bed invariably does better than an old one, no matter how we treat it, for the strain of bearing a heavy crop of berries is a severe one, and must necessarily weaken the old plants. For that reason also I would prefer to take plants for setting from a young bed that is just ready for bearing its first crop. But when one has been neglectful, and failed to make a new plantation for home use, as I did this year, then we must do the next best thing.

This I find to be the plan of taking up nice and thrifty plants in big chunks from the old bed after the picking season is just over, preferably in a wet season or shortly after a heavy rain, and set these chunks in trenches dug deep enough so that the plants stand on the level, the rows being of the customary (four feet) width, and the chunks set five or six feet apart in the rows. The chunks are carried from the old to the new patch preferably on a stone or mud boat, or on the wheelbarrow, never on a wagon, so as to avoid shaking them about and loosening the dirt from the roots. On a wheelbarrow we can usually carry only about eight of these large chunks of earth to a load, and possibly not over fifty on a stone-boat. Consequently the job of making a new plantation in this manner is necessarily slow. But if it is done in a wet time, the plants hardly know they have been moved, and when carefully handled and planted, will throw out new runners abundantly, and make closely matted rows by fall, and a good crop of fine berries the following season. The plan will answer when we cannot do any better.

If we have neither planted in the spring, nor have the chance to make a new bed by the "chunk method," then there is the third choice, to be found in setting so-called "potted plants." It is possible to raise at least a partial crop on fall-set potted plants the following berry season. Here at the North I have been unable to grow even a fairly good yield on such plants, no matter how carefully they had been potted off and transplanted. But even a small crop is better than no berries at all. Whether it be done in spring, summer or fall, the strawberry patch must be planted. We can't do without it.

Canning Surplus Vegetables for Sale

At various times I have been asked about the feasibility of utilizing surplus vegetables by canning them for sale, and also about the profits that might be expected from running a moderate-sized canning-plant. For a number of years the prices (wholesale) of canned tomatoes, peas and other vegetables had been so low that I could not see any profit in the business except where done on a very large scale and in such a manner that the expenses were held down to a minimum. Now that there has been a general advance in prices, there may be at least a chance of making an undertaking of this kind, on a moderate scale, pay quite well, especially when the raw materials are to be had at small cost.

Some experiments have recently been made at the Louisiana station in the canning of fruits and vegetables with a canning outfit costing only \$10. The results are published in Bulletin No. 81 of that station, and show what perhaps may be accomplished on many farms at little labor and expense, and at considerable profit. The reader interested in these things should try to secure a copy of the bulletin.

There are a number of cheap canning outfits on the market which do very satisfactory work with practically all fruits and with nearly all vegetables. The one used at the Louisiana station had a capacity of three hundred two-pound cans and two hundred three-pound cans a day. It consisted, essentially, of a specially constructed galvanized iron boiler made to fit either a No. 7 or 8 kitchen stove, a basket or carrier that fitted inside the boiler, can tongs and soldering irons. The expense of canning six hundred two-pound cans of tomatoes a day amounted to \$21.40. The tomatoes sold at seventy cents per dozen cans, or at a total of \$35, which left a balance of \$13.60 to pay for

the tomatoes used. As a bushel of tomatoes will yield about twelve three-pound cans of the finished product, or probably eighteen two-pound cans, the quantity used for the six hundred two-pound cans was slightly in excess of thirty-three bushels, so that the returns per bushel of tomatoes were about forty cents.

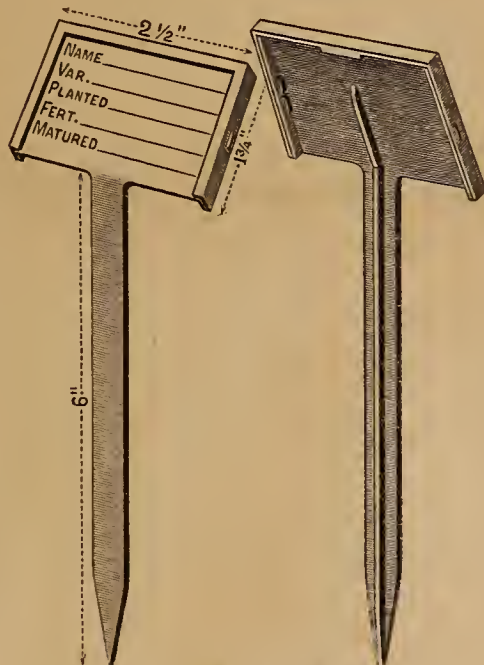
The station gives full directions for canning tomatoes, and states that string-beans, asparagus, rhubarb, okra, cauliflower, strawberries, blackberries, raspberries, peaches, pears, plums, cherries, apples, figs, etc., can be successfully canned in a somewhat similar manner.

Farmers' Bulletin, No. 259, gives a synopsis of the Louisiana station bulletin, and the directions for canning in full. If the reader is unable to secure the original bulletin of the Louisiana station, he may apply to the Department of Agriculture, Washington, D. C., for a copy of Farmers' Bulletin No. 259.

The Question of Labels

In experimental work we need label stakes. Most of this work is temporary; needed only for a few weeks. For instance, in the matter of testing lettuce varieties, the crop matures in the course of a couple of months, and the labels have to go with the crop. Even in a home garden of modest size and pretensions we often like to keep track of the varieties, and a test patch of any kind of vegetables, marked with nice and uniform label stakes, appears attractive and, I might say, on dress parade. I use the eight-inch stakes of clear pine, sandpapered and painted with white-lead, writing the name of the variety on it with the ordinary lead-pencil. The name usually remains legible for a much longer period than is required.

These label stakes are short enough that they offer no obstruction when we run over the rows with a hand wheel-hoe. I usually buy them by the hundred in the



LABEL STAKE

seed-store. A good price is charged for them, but I like them on account of their uniformity and finish. Homemade ones are of course much less expensive, and will do well enough. When no longer required in a patch, these stakes are or should be carefully gathered up, and may be cleaned with sandpaper, thus made ready for a second or third service. For labeling trees, shrubs or other perennial growths on lawns, in orchards, etc., we need permanent labels, and we have often been puzzled to know what to use.

There is on the market a most excellent label stake for such purposes. It is made of cast-iron in the form shown in sketch. The name and data of planting, etc., are written on a piece of cardboard which rests on the iron plate, and is protected by a piece of mica. It seems to be a businesslike label, and practically indestructible.

Working in the Rain

Editor Collingwood tells in "Rural New Yorker" of having to pick strawberries in the rain, so as not to disappoint a customer. His story runs as follows:

On Saturday afternoon the boy was in some trouble. You would have been at his age, after taking orders for forty quarts of berries and a bushel of peas (all wanted for supper), and here was the rain falling in a regular stream. It is a fine thing to eat strawberries with plenty of sugar and cream, and it isn't so bad to sit in the shade and read how some expert grows them. It is another story to get down in the dirt and make the plants grow, and still another to pick in a rain. The vines appear to hold more moisture than any sponge you ever

saw, and they hold it where it will do you the least good. The rain will find a way down your back in spite of your best effort to hold your head up. Yet this is a part of the strawberry business. Mother was inclined to let the berries go, but I don't like to disappoint customers—so we all got out in the wet and filled the orders.

My friend has one advantage in that he can go out on his land, presumably a sandy loam, in or shortly after a rain without having to carry an acre of land around on his boots. Our soil here when wet is sticky, and I avoid going out on the land in or shortly after a rain if not absolutely necessary. We have to now and then, to accommodate a customer. In such cases, of course, we put rubbers over our shoes, and perhaps a rubber coat and rubber hat. The mulch of course stuff—marsh hay, corn-stalks, strawy manure, whatever it may be—which is or may be put on the ground between the rows of strawberries, raspberries, currants, gooseberries, and possibly cauliflowers, cabbages, etc., comes quite handy, too, in a rainy time. It keeps the mud off our feet.

*T. Greiner*

Salient Farm Notes

A Farmer's Garden

A YOUNG farmer in Indiana writes for advice about managing a "farmer's garden." He says he is farming eighty acres of land, and as he has a nice place he has quite a good deal of "company" in summer, mostly relatives who live in two large cities. He says this "company" is obliged to entertain itself most of the time, as he is too busy to give it much attention; but he says it is made up of nice people who assist his wife with her work, so he does not mind it. He says: "This summer company is composed mostly of young lady friends of my wife, and as they come here to rest up and have a good old summer time I have no kick coming. The chief trouble I have is to provide good vegetables for the table at the time when they are here, July and August. All the early truck is gone and there is little left but the potatoes and some sweet corn. What I want is a good supply of summer vegetables for July and August. I have a good deal of work to do and but little time to give the garden. I want to do most of the work with plow and cultivator and cut the hand-work down to the minimum."

It is not a difficult matter to provide plenty of early vegetables, that is, vegetables in season, but I have had lots of trouble with the summer crop, chiefly owing to drought and insects. If I desired to set a nice vegetable table in midsummer I would plant sweet corn, potatoes, melons, squash, beets, cabbage, head lettuce (the cabbage sorts have always stood heat and drought best with me), onions, summer radishes and tomatoes. Sweet corn, early and late sorts, and potatoes can be managed about like field corn. Melons and squashes do best on a piece of sod, but will grow well on any deeply worked rich soil, and they can be cultivated with the corn-cultivator until the vines get too long. I would have lots of melons, not to eat between meals and at night, but for table dessert. There is nothing better in summer weather. I would also have lots of tomatoes. Get these and the melons out as early as possible. Lettuce, onions, beets and radishes should be given plenty of room, and can quickly be cultivated with a garden-cultivator, leaving but very little hoeing to be done. Have everything planted in rows, with ample turning space at the ends. I had forgotten beans. I would have both bush and lima. The best place to plant lima beans, if poles are scarce, is along a woven-wire or netting fence. Two or three plantings of bush-beans can be made, and one can have them all summer.

The one thing to provide against is drought. I have seen gardens in midsummer with scarcely a thing in them fit to eat. Things looked like they had been scorched and withered by fire. The best way to provide against drought, in the absence of irrigation, is to make the soil rich with well-rotted manure applied in the fall and plowed in deeply, followed by deep cultivation in the spring. I would loosen the soil twenty inches deep if I could. Last spring I loosened up part of my garden to a depth of fifteen inches with a strongly made double-shovel plow,

going over it twice, and the soil is still loose underneath and truck has grown splendidly in it, the long midsummer drought affecting it very little. To be sure, I have kept the surface mellow to a depth of about three inches. In almost any small garden the double-shovel plow will be found a much better implement for stirring the soil in the spring than a turning plow. It can be made to run deep and it leaves no furrow. It will not turn manure under, so for this purpose the turning-plow must be used.

A vast number of farmers have little or nothing in the vegetable line to eat in midsummer except possibly potatoes, and maybe cabbage, when they of all people should have an abundance. It is not lack of time to grow these things that they do not have them so much as lack of good management. They are exactly what the farmer needs on his table, and he can have them if he will make an effort in that direction. A heavy coating of manure should be applied this fall as soon as the crops are off the ground, and it should be turned under at once. Get the land intended for these summer vegetables well filled with humus, and keep it filled, and you will find it easy to grow a good supply during the entire season, and your summer visitors who descend upon you to swing in your hammock, romp in your hay-mow, loll on your porches and devour your substance can be supplied with fresh, dew-covered vegetation at a minimum of expense, and the stenographer and typewriter girl and saleslady, whose Mecca in summer is the country, will be welcome. There is no question that both summer visitors and host are benefited by their interchange of experiences. The host learns a great deal about life and business methods in the city, and how a salary that appears to be very large must be carefully managed in order to pay necessary expenses, while the visitor learns to count among the brightest and most carefree days of her life those spent on Cousin Ted's farm, where she fed chickens in the morning, helped Ted's wife do up her morning's work and prepare dinner, slept most of the afternoon, and flirted with the neighboring young fellows in the evening.

Best Fresh Meat for Midsummer

"M. E. A.," who says she lives "in the mountains of Georgia," and "R. S.," whose home is fifteen miles from town on a Nebraska prairie, ask me what we do for fresh meat in midsummer. They say they get tired of bacon, and it is almost impossible to get fresh meat of any kind. I never have found it a difficult matter to obtain all the fresh meat, in the form of nice, plump chicken, that we wanted. With many kinds of vegetables we like a little bacon, but all of us, the boys especially, are very fond of young chicken, and we aim to provide for this fondness. It is a safe conclusion that the average farmer's family can easily, and with infinite delight, consume at least one hundred chickens during the summer season. I know many families that consume two hundred and over every season. One farmer who has a lusty family of eleven told me that they used three hundred and sixteen chickens on the table the past year. Like him, I think chicken is the best fresh meat one can use in summer-time. It can be prepared for the table in so many ways that one does not tire of it. Poultry is the best fresh meat for the farm, because there is no waste. Any family can consume a fowl, young, plump and toothsome, in one day, while the meat is perfectly fresh. The farmer who fails to provide the necessary conveniences for the raising of a good supply of chickens is not living up to his opportunities. These conveniences cost but little, and if reasonably well cared for will last almost a lifetime. Raise lots of chickens for the table.

*Fred Grundy*

Did you ever think of FARM AND FIRESIDE as a great market-place? Probably not—but that is what it is. And it is one of the biggest and best market-places in the world, because merchants come from over all the country and place before you as their valued customers their choicest goods at their lowest prices. Not only that, but its policy of allowing only reputable merchants, who deal fairly and squarely and just as they claim, to use its advertising columns, is able to make its pages the cleanest market-place, as well as the biggest and best. Do you patronize the people who bring their goods to this FARM AND FIRESIDE market?

No advertiser can use FARM AND FIRESIDE unless he is honest.



### Lawlessness on the Farm

"O H, PA, somebody's cut one of the biggest trees in the lower woods! Come up and see!"

The eyes of the little chap are big with excitement, and his cheeks red as roses from his scurrying down through the fields from the woods where he has made this discovery. We do not wonder at his disturbed state of mind. A big tree cut in the woods! Who could have done it? And we gather ourselves together, and hand in hand with the little man, and followed by other boys, big and little, with old Shep to lead the way we hurry up to the wood-lot.

Yes, it is as our little man has said. Here lies a splendid maple, stretched at full length on the ground, its life cut off by some man who never knew the beauty of a tree or its worth as a member of the family.

"It is a shame."

So declared one of the older boys.

"Takes so long to grow a tree!"

"What did they do it for?"

Little man wonders about that most of all. Why should he not?

"Well, there may have been a coon or some other animal up there that he wanted to get."

"And would he cut down that good old tree just for a coon? He didn't think much of trees, did he?"

"Not so much as you and I, little man!"

Well, there the tree is. Someone who never had a foot of ground he could call his own, and who has not the heart to appreciate the beauty and value of a tree, has deliberately walked to the farm of his neighbor and done this deed. Lawless man. Unlawful deed. It does not seem, as our little boy says, as if anyone could have the heart to do such a thing. Especially a farmer young man.

And yet, this is not the only unlawful deed that has been done by young men in the country. I know of cases where long strips of lead pipe have been taken out of springs and carried away to be sold by those who do not stop to think that they are laying themselves liable for these acts of lawlessness.

Only a few years ago several shocks of corn were burned in the field of another farmer I know of. It was known who the young men were that did this deed, but the owner of the farm thought it might be the worse for him if he took any steps in the direction of arresting the marauders and bringing them to account.

The commissioner of one of the largest states in the Union told me once that he had often found fences down on his farm, so that cattle could go through and destroy grain and other crops at will. He himself had had a fine field of wheat sadly injured in that way. He was very anxious that the laws of his state should be strengthened so as to put a stop to these acts of lawlessness.

Worse than all, not infrequently do farmers find some one or more of their sheep dead in the pasture, shot by some irresponsible wanderer. In other cases tails of cows have been cut off, and to cap the climax, poison has been put into apples and left where cattle will get it. These are the deeds of really desperate and dangerous characters, wandering at will about the lands to which they have not the slightest claim. It is a serious thing to think of.

How can we escape these acts of vandalism? No doubt the first thought would be, "We should make our trespass laws more severe." Let the man who thinks this try to secure the passage of more stringent laws. He will at once find that he will have arrayed against him, not only the irresponsible men of his own neighborhood, but those who belong to the sporting class of the towns and cities, who like to get out for a day and hunt and shoot and kill everything, no matter how big or how little, that comes in their pathway, and do not want to be hindered in what they call their sport. Are we then helpless?

Most of the states have laws providing that if notices are posted forbidding trespassing we may secure relief from this form of lawlessness. It seems a little hard to be compelled to defend one's own property in that way. Who likes to post his farm over with signs of "No trespassing here?" And yet, there is the old maple tree, cut down and dead forever. That hurts, too.

I wonder if it would not be a good thing if every father and mother were to begin early to teach their boys the value of personal rights? Most farmer boys would no more disturb the property rights of their neighbor than they would do a wrong act on the land of their own fathers. That is the right spirit. Who would think of climbing over the fence in the city and cutting down a tree? How quickly would the man who did that be arrested and punished! Ought not trees and all other property of the kind

## Farmers' Correspondence Club

to be just as inviolate in the country as in the town?

We are not careful, fellow-farmers, to teach our boys and girls to honor and respect the rights and the property of others. This word is spoken in the hope that someone may be inspired to think of this more seriously.

And the little man and I would like just one word more with the young man who is tempted to do some act that he thinks now all right. It is a careless way to look at it, dear young friend. If you were a landowner yourself, and we hope you may all be some day, I wonder how you would feel to go out and find that someone had hurt one of the farm animals thoughtlessly, or cut down some beautiful tree? Think of this. The golden rule applies here just as much as anywhere. Be a man, always and everywhere. You can have plenty of good times and do all that any man ever should do, and still do no act of lawlessness.

Don't do it!

New York.

EDGAR L. VINCENT.

### Fertilizer Questions

The farmer who has never drilled commercial fertilizer with his wheat is liable to ask two questions. In the first place, he desires to have proof that it pays. In the second place he wishes to know if the fertilizer is liable to have a detrimental effect on his soil.

It is lamentable that among farmers there is such general and glaring ignorance of the nature of fertilizers. A low-grade rock phosphate, "lime fertilizer," and high-grade complete fertilizer meet together on the market as "fertilizer," or more probably "phosphate," and actually compete with each other in the minds and wallets of the farmers.

But to return to the two questions. Does it pay to use fertilizer? The best answer is to buy a bag of the goods and drill it on one side of a field at the rate of two hundred pounds per acre, then wait till harvest.

Secondly, does it injure the soil? The writer has observed many farms on which it has been largely used for from fifteen to twenty years, and no bad results appear, but in most cases the soil is in better condition than when fertilizer was first used.

Ohio.

GEO. P. WILLIAMS.

### Hairy or Winter Vetch

The hairy vetch is often spoken of as a valuable legume, and no doubt it is valuable where it can be successfully grown. But my experience with this new leguminous plant is not very encouraging. It is true that I have never tried the artificial inoculation of this new plant, and this may be one cause of failure.

Three years ago I sowed a small trial plat of hairy vetch; the seed was sown August 27th on moderately good ground. Only about half a dozen of the plants survived the winter, and these made very good growth. They did not develop nodules on the roots, and only matured a few seed-pods.

Last fall I sowed another trial plat, somewhat larger than the one before, and this time I got a pretty good stand that stood the winter all right, but when spring came the plants made very little growth. The vetch plants were small, sickly looking vines, a foot or two long, that bore a few bunches of blossoms each, but did not make sufficient growth to be worth anything. I will not try the vetch any more without inoculating the soil.

My experience with the nitro-culture sent out by the department of plant industry for soy-beans does not promise much so far.

West Virginia.

A. J. LEGG.

### Lightning Conductors

Your correspondent of June 1st says some good things about protection and conductors, but on the main question, material and price, considering quality, he is at sea.

It is an accepted fact that iron is better than steel for telephone purposes, but that does not prove that iron is better than copper for conducting electricity. The fact that electric-light plants, long-distance telephone systems, and through-line telegraph systems all use No. 14 copper wire, sets aside the idea that iron is better than copper as a conductor of electricity.

Take the table set forth by scientific demonstration, and you will find silver in the scale at 136, copper 100, iron 16. Bulk silver is worth about eight dollars a

pound; copper, thirty cents and iron, two and one half cents. You see that copper will carry more than six times as much electricity as iron. Any person seeking protection desires the best available, and if the iron wire cost four cents a foot and does one sixth as much work, that would put the value of the copper cable at twenty-four cents a foot. After all its the quality we want, and price should not decide the matter.

Protection to a man's house and family are of more consequence to any man than a few rusty dollars. Men who consider these things aright acknowledge that their first duty is to the family, and nothing is too good for their safety, comfort, happiness and protection.

My business has brought me in close touch with farmers and their property, and in an experience of many years I have never found any building damaged by lightning that was supplied with copper rods. But we have had a number struck, some wrecked and some burned in the use of iron rods. It is the capacity or power to conduct that counts in this case, and the cost should be a secondary matter, because lightning kills, and enough will travel on a No. 16 wire to kill a whole family. Missouri.

GEO. W. FREY.

### Extinction of the Cockle-bur

There is no excuse for cockle-burs on any man's farm. They are bad for the owner and bad for the tenant, even though he should be a one-year tenant. The clinging of the burs to his stock after his corn is husked, and to his coat when he walks through his field, is a nuisance.

On the big farms of the West and Northwest, very little corn is cut for stover. The plan usually followed is this: Plant forty to one hundred and fifty acres of corn, the number of acres depending upon the size of the farm and the number of laborers one can employ to assist him in planting and cultivating the crop. As soon as the crop is gathered, the "stock," as it is termed, is turned into the field. If the farm has bur-weeds from four inches to three feet in height, the "stock" will find them. Many times have I sat down to milk when my front finger got a small prong in it from one of those burs.

Fall plowing is good, but sometimes the seeds have ripened before one can get at it, and sometimes small burs will spring up after the plowing, grow about three inches high, produce two burs which will ripen.

The thing to do is to take a sharp hoe, go through the corn, cutting not only large but small, and cut them all so they will die.

I can remember a farm my father bought many years ago. It had been farmed by tenants, and was practically seeded to burs. After harvest and "stacking" were over (we stacked all our grain then), father put my brother and myself in those corn-fields with sharp hoes. Some days he helped us, for more often he would say "Come boys" rather than "Go boys." It was a hard task for two boys to go through forty acres, but we did it, and the next year we did the same and there have been no burs on the farm since.

It looks like a slow, tiresome task, but it is not as bad as it seems, and it is sure. It adds dollars to the value of a farm. One of the worst-looking weeds is a cockle-bur. Other weeds such as the "velvet weed," as it is named, in some localities, can be eradicated in the same manner.

Illinois.

U. S. ELLSWORTH.

### Clark's Grass Report

Here is the report of my first grass crop of 1906, timothy, red-top and alfalfa. The season has been cold and backward; for that reason the total weight is somewhat less than it would otherwise have been, especially in alfalfa, for that is a hot, dry-weather plant. Last winter was a hard one in this section for all kinds of grain and grass. Some fields made mid-winter growth, and were badly injured, but mine came through all right; in fact, they always do. I don't think that in twenty years I have lost a rod in winter-killing. Many said that alfalfa would be killed out, but it came through the winter all right.

My eleven acres of timothy and red-top produced the first crop this year. Sixty-one loads, total weight, fifty-two and one half tons. Four acres of this was seeded September 10, 1905, and cut June 25, 1906. Eight months, fifteen days from the time the seed left the bag, forty thousand nine hundred pounds of dry hay—making over five tons to the acre. Three and one

half acres of alfalfa cut June 10th, made one ton to the acre. The second cutting will be made thirty-two days from the time of the first cutting. I think there will be at least one and one half tons to the acre of good, dry hay. The present outlook is that it will produce a full increasing crop every thirty to thirty-five days. I shall look with interest to its rise and progress, and think it will produce four crops this season, possibly five. I am doing the best I can to produce a large growth. I would not advise my farmer brethren, however, to make a rush into alfalfa, but I think that some of the present waste land in this eastern country can be utilized in its production.

Connecticut.

G. M. CLARK.

### The Grains

All the grains, including wheat, corn, oats and rye, require nitrogen for growth, and potash for stalk development, but for plumpness of grain they need phosphoric acid.

Too much stable manure causes growth of straw, but the crop goes down before maturity under the influence of wind and rain. It is on the grain crops that phosphoric acid should be used to the best advantage and profit.

Pennsylvania.

M. A. SPEAKMAN.

### Improvements for Beauty and Profit

Most farmers admire the beautiful homes and smooth lawns of their city friends, but few think of doing anything to improve the looks of their own. You cannot make a mansion out of a simple farmhouse, but by a little labor and a few dollars you can make a new place out of your home.

Farm land is not so valuable that one needs to have his front yard full of chicken-coops, old wagons, etc. There are many things which cost scarcely anything but a small amount of labor that help in making the home more attractive, such as planting shade and ornamental trees, making flower gardens and building a summer-house, etc.

Many farmers do not "slick up" their homes because they think it does not pay. If you should ever want to sell your farm, it would sell twice as quick and for a great deal more if everything is in apple-pie order. You will find that you can sell your produce to better advantage and for a higher price if things look neat and attractive about your farm. If you are in doubt about it, try it one year, and you will find that it pays both for beauty and profit.

HOWARD ZIMMERMAN.

### Dig Potatoes Early

I think it pays to dig potatoes as soon as possible after the tops are dead. Potatoes dug in August, and piled in some outbuilding, away from the sun and chickens (not too many in one pile), will keep better through the winter than those that are left for late fall digging. They are not apt to become watery from having taken the second growth.

Missouri.

R. A. POTTS.

### Ground Twice Fall Plowed

A Tama County, Iowa, German farmer has adopted a plan of fall plowing that is a general custom in Germany.

In the fall he plows the same piece of land twice. The first plowing is done just as soon as the harvest is over and the second just before corn-picking begins.

This man's land was very high-priced, and he wished to make it produce better returns, so in the fall of 1904, he tried the custom of his Fatherland.

The land twice plowed in the fall of 1904 was planted to corn in the spring of 1905 and in the fall yielded fifteen bushels more to the acre than land once plowed. It certainly is an experiment worth trying.

Iowa.

H. L. MOUNTY.

FARM AND FIRESIDE never lets any advertising matter get into its reading columns. That's what some people call purifying your paper. But FARM AND FIRESIDE doesn't do it for that reason—the advertising columns are just as pure as any other part of the magazine, in fact they are edited even more carefully to make sure that nothing gets in to harm our people by false claims or unfair dealing. But FARM AND FIRESIDE does believe in keeping references to advertisers out of the reading columns so as to give every advertiser a fair chance. They all deserve your patronage, for they are all honest, hard-working people who are using FARM AND FIRESIDE as a counter over which to sell their honest goods to the best customers in the world—the prosperous farmers and their families. These are the people FARM AND FIRESIDE reaches.



## Gardening

### Onions in New Mexico

TOUR friend in New Mexico who tells of having made repeated failures in growing onions, I would say, try the Prizetaker onion as well as the Bermuda, under the method known as "the new onion culture," if you have a chance to sell a good large onion at two cents or more per pound. Sow seed in the fall, and transplant the seedlings.

### Too Much Manure

A reader in Decatur, Illinois, says he has a city lot on which he has put a number of good coats of manure, and has plowed the spot about half a dozen times, mostly for the sake of letting his chicks have the earthworms. Now somebody has been telling him that the manure applied will burn out the plants that he has put in. I have great faith in the virtues of good stable manure, and secure such excellent results by making very free use of it that I would not be afraid of putting too much on, or of ruining my land thereby for the production of general garden crops.

We must use a little discretion, however, in the application of fresh or raw poultry manure. There is a possibility of using too much; yet few of us have such a superabundance of it that we would be liable to hurt our crops so long as we apply it evenly and get it well mixed in and through the soil. Repeated plowing and harrowing will accomplish that in the most thorough manner. On the whole, manure and plenty of it is the key to success in gardening.

### Onions Going to Seed

"Why do my bunch onions all run to seed this year?" asks an Iowa reader. "They were started from bottom sets as usual, and heretofore we had only an occasional specimen run up a seed-stalk. This year all seem to do it." It depends mostly on the size of the sets, and to a smaller extent on weather conditions. If the sets are large, say larger than a marble or cherry, they are liable to make seed-stalks; if smaller, they seldom do. In a very dry season, here with us, a larger proportion of the plants try to develop seed than in a wet season.

A California reader, who sowed seed of Prizetaker, Yellow Globe, Wethersfield, Australian Brown, etc., on August 22nd of last year, and transplanted the onion seedlings from December 5th until well along in January, also complains that the onions are all going to seed. Probably the seed was sown too early. Try sowing at a little later date.

### The Bean Weevil

A reader in Mervin, Ohio, asks whether the weevil gets into the beans after they are stored, or whether it forms in the bean and bores out. I believe that the weevil deposits its eggs inside of the young bean, and that the worm also hatches and develops inside of the bean, then bores out. The fact is, however, that if a badly infested lot of beans is stored in a tightly closed bag, box or other receptacle and left over winter, or possibly for a year or two, the weevils may eat up the beans and leave little more than a few shells and some dust, besides their own excrement.

The remedy for the weevil pest is never to plant a weevil-infested bean (a bean with a live weevil in it), and never to store beans of any kind that may possibly be infested with weevils, without treating them with bisulphid of carbon. Simply place a dish containing some of this bad-smelling and highly inflammable liquid upon the beans in a tight box or barrel, and close tightly with a close-fitting cover. Leave thus for twenty-four hours or longer, and there will be no live weevil inside of the beans thereafter.

### Manure Tells

Last fall I bought two car-loads of Buffalo stock-yard manure, and spread it over my poorer ground. The effect was not quick enough to make much show in the crop of White Portugal or Silverskin onions grown from seed sown in August and intended for green bunching onions in May and June. But the effect is remarkable in the crop to follow, may these be potatoes, beets, cabbages, corn or vines. Besides, it is just such a

season here where manure applications tell, a season with frequent and abundant rainfall. For some years to come, however, I shall be in shape to grow fine garden crops on these lands with a very moderate amount of manuring.

I find that usually in this vicinity with the stock-yards less than twenty miles distant, I can secure my plant foods much cheaper in the form of animal manures than in chemical fertilizers. On our soils the good old manures give better results, and last longer than the concentrated manures. I now buy the latter only in moderate amounts, and mostly for special purposes, in the form of standard chemicals. I like to have a little nitrate of soda, and some superphosphate; but could even get along without them as long as my soil is given plenty of stable manure.

### Keep Your Head

A New Mexico reader gives us a story of failure in onion culture. He writes:

We have made two entire failures in onion growing for market, notwithstanding the big stories told in most of the catalogues and farm journals about the thousands of dollars made by growing onions.

Last year we put in half an acre of the best seed we could get, consisting of Prizetaker, Yellow Globe, Red Wethersfield, Yellow Danvers, Golden Globe, Mammoth Pompeii and Silver King.

We sowed them in rows fifteen inches apart. They all came up nicely, and we put in time enough in weeding, thinning and cultivating to have raised forty acres of corn. They ripened very irregularly. We got about 5,000 or 6,000 pounds of fair onions, but nearly every one commenced to sprout as soon as housed, so that we only got 700 pounds of good onions out of the lot, and we could not get an offer of two cents a pound for them. We fed them all to the hogs.

Then we had a lot of little ones, having made no bulb at all. We planted a fourth of an acre with them, having been told that they would make nice large onions. They all went to seed, making another failure.

Last spring my son sent to Bermuda or some other foreign country for onion seed, and we planted a fourth of an acre. The onions ripened prematurely, and the bulbs are of the size of a dime to a quarter—another failure.

Farm papers often tell stories of big profits made in this or that crop. These stories are often true. When the combination is right—the right man, the right local conditions, the right crop—large profits are and can be realized. But the first thing to do in any case, before one engages largely in anything that is thus boomed for profit, is to make sure that the combination is right. In most cases this can be discovered only by experiment.

The man who reads of \$1,000 or \$2,000 profits per acre in onions or in any other crop, and loses his head to the extent of planting a half acre as a first venture, not knowing whether his soil and climate are adapted to the crop, or what chances of sale or storage he has if he should raise a good crop, does not use proper discretion. He invites failure, and will most likely pay ten prices for tuition.

This is also the sure fate of the man who is carried away by the prospects of wonderful profits in "seedless apples," "vineless potatoes," Mexican rubber plantations, and many other things about which wonderful stories are told in flaming and inflaming advertisements.

The onion is at least a legitimate and often very profitable crop. So is the strawberry, the raspberry, currant, asparagus, etc. In every case, however, the wise person will first ascertain by small and inexpensive tests what he can do with the crop; whether it suits his local conditions and markets, etc., before he will risk planting it by the acre or even half acre. In short, always look before you leap.

### Black Rot of Tomatoes

In a season favoring fungous development, I believe we are nearly helpless and powerless against the affection known as blossom-end or black rot of the tomato. Spraying with Bordeaux mixture has been recommended, as also trimming and training the vines so as to allow a free circulation of air around the plants. This rot is seldom so serious with me that I do much to fight it. I take things as they come. This season, up to this time, I have not seen the first sign of the disease.

*A. Greiner*

## Fruit Growing

### Seedless Apple Again

JOHN COX, of Miami County, Ohio, in a recent letter, states that he has had for over forty years, a seedless apple in his yard that has never had any bloom and has borne considerable fruit. A few years ago, when going through the experiment grounds of Luther Burbank, he called my attention to some of his plum trees, the flowers of which had no petals and yet they bore considerable fruit. I think that probably in the case of the seedless apple mentioned above the flowers do not have petals, and hence the flowers are not seen although they are produced.

Quite recently the parties that have been advertising the seedless apple, which I regard as a first-class humbug, have been advertising a seedless Sultana grape. This grape has been known for many years, and is a standard fruit in California, where it is raised in large quantities and forms the common seedless raisin of commerce. It is not, however, a new thing, nor is it at all adapted to sections east of the Rocky Mountains, as it is of the European wine-grape stock, and plants of this stock have never succeeded where the common grape-root louse is found, as it is in sections east of the Rocky Mountains.

### Trimming Raspberries

J. W. D., Peoria, Ill.—If raspberries are to be laid down in winter I think it is a poor plan to pinch them at all. In the common garden I think it best to have a small trellis for raspberries to keep them from blowing down, and then pinch them once when about two feet high. This will cause them to branch, and they will then keep in good shape. Formerly it was thought that pinching raspberries caused the fruit to set on the lateral branches, and more fruit would be produced, but recent experiments show that the results from this treatment are not at all certain. The above refers to summer pruning.

In the spring it is generally a good plan to shorten back the canes of red raspberries a small amount, so as to remove the weak wood. In the case of black caps I think it a good plan to trim them quite severely and to cut off about one third of the growth. This thins out the fruit, and I think leaves the canes in such shape that what is produced is of better quality than it would otherwise be. All pruning of raspberries in the spring should be done when the buds are swelling.

### Thinning Raspberries

M. C. W., Mass.—If the space between your rows has become filled up with raspberry suckers they may be pulled up, and the balance left far enough apart so that they will have room enough to grow to advantage. For this purpose they should be at least four feet by six feet apart, and not over five or six canes left to each stool.

However, where raspberries have grown together in a mass, such as you describe, I think it generally better to set out a new plantation rather than try to renew the one already planted by thinning out. The suckers which you thin out will make good sets for transplanting. The best time to do this would be this autumn or early in the spring. The best fertilizer for raspberries is good stable manure. Where this cannot be had, a mixture made up of four hundred pounds of ground bone and one hundred pounds of muriate of potash is one of the best.

### Peach-Borer

W. C. W., Hanna, W. Va.—The common peach-borer, is, I take it, what you refer to, as you describe its method of working very completely, starts from a moth which lays its eggs in the Northern states from the middle of July to the last of August in the bark of peach trees near the surface of the ground. These eggs are laid singly and glued to the bark. These soon hatch out into little borers that work their way into and under the bark, where they continue to tunnel until cold weather sets in. They winter over in their tunnels, and in the spring continue their work, but go through their transformation and emerge a bluish, wasp-like moth in midsummer. Wherever their tunnels are found a mass of jelly-like gum will be found.

A great many remedies have been sug-

gested for this pest, which is very generally troublesome wherever the peach is grown on a large scale in this country. Perhaps the best way to prevent this injury is to look over the trees early in the spring and again in August, and remove all the borers that are then found. By thus going over the trees twice a year they can be kept very free from this pest. Washes of soft-soap and other deterrents have been recommended, but on the whole, these are not satisfactory. Some growers have gotten good results from putting a piece of soap in the crotches of the trees and allowing the soap to wash down the trunk by the rain. It has sometimes been recommended to put a pile of wood-ashes near the trunk of the tree, and thus deter the moth from working where they commonly lay their eggs; but in such cases the moths will often lay their eggs higher up in the trunk of the trees. Where one has only two or three trees in a garden, it may be good plan to cover the trunk of the tree with wire mosquito netting so as to keep off the moths, but on a big scale I do not think this a desirable practice.

This insect also attacks the plum, but in this case does not cause an exudation of the gum which is characteristic of its work in the peach.

### Insects on Rose

S. K., Annabella, Utah—The aphid on Crimson Rambler rose may be destroyed with strong soap-suds made by dissolving one large cake of white laundry soap in fifteen gallons of water.

The insect that skeletonizes your rose-leaves and eats off all the green surface may be killed by spraying the foliage with paris green and water at the rate of one heaping teaspoonful of poison to two gallons of water. This will not hurt the bushes.

### Distance Between Trees

C. R. U., Grafton, Vt.—The close distances recommended in "Amateur Fruit Growing" is for the purpose of securing protection. At the time that book was written it was regarded as good practice for Minnesota and the Dakotas. Since that time the practice has changed and now it is recommended to plant Duchess and similar trees about twenty feet apart each way. In that climate fruit, when somewhat shaded will color up much better than in any of the Eastern states, owing to the fact that there is more intense sunlight. I think that probably the best distance for that section would be to put the trees about twenty feet apart in rows thirty feet apart so as to allow plenty of room to work among them.

I am quite familiar with the conditions in New Hampshire, Massachusetts and Connecticut, and it is my opinion that Baldwin apple trees should be set not nearer than thirty feet and that thirty-five feet is a much better distance. Under some conditions it may possibly be best to put in fillers between these trees and cut them out as soon as the trees crowd.

### Mildew on Roses

M. A. D., Elmwood—The leaves of the rose which you sent on are covered with powdery mildew. This injures the leaves and will probably prevent to some extent the production of autumn flowers. It can be entirely prevented by dusting the foliage of the plants with flowers of sulphur, but this should be done as soon as the disease appears. This occurs some years much more than others, and is largely due to climatic troubles. Roses that are situated in poor situations, for instance, where they are partially shaded, are very liable to have this trouble. Some varieties are much more liable to it than others. Gen. Jacqueminot is one of the healthiest, and while somewhat subject to this disease in autumn, it ought not to be troubled much with it in a good situation at this time of year. I am inclined to think that your plants are perhaps crowded together so that they do not get the full sunlight, or are otherwise shaded or shut in, or you would not be troubled much with it.

*Samuel B. Green*  
\* \* \*

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# Poultry Raising

## Something Choice for Home

IN ENGLAND the Dorking fowl is kept upon every farm, not that it is considered superior as a layer, but because there is no fowl that is regarded as equal to it for the table. It has five toes on each foot, and in the market the purchaser examines the carcass carefully, the five toes indicating excellence. The Red Caps, Hamburgs, Leghorns and other breeds are also kept, but the Dorking is never missing.

In America the Games are considered fully the equal of the Dorkings, and some farmers and poultrymen keep a few Games for use at home. Some of our well-known breeds—Wyandottes, Plymouth Rocks, Brahmas, Langshans, etc., are above the average for table fowls, especially if prepared by careful feeding.

Why should the farmer send his best to market and pay high prices for meat in other forms? It is just as easy for the farmer to keep a breed that will provide choice meat as to take his chances with all kinds.

To fatten fowls or chicks quickly it is absolutely necessary to give such food as will best accomplish the purpose, and to this end plenty of milk, in any state, from fresh to thick, fed in connection with a grain diet, is excellent. Those who make a specialty of fattening choice poultry in coops add one ounce of melted suet or tallow to a quart of ground grain, which should be moistened with milk. Feed four times a day for ten days, giving as much as the fowls will eat at a meal; one meal should consist of green food. A little animal-meal and linseed-meal every other day will not be out of place. Always fatten quickly, keeping two or three birds together in small yards, allowing a plentiful supply of water. Keep the coops clean, provide gravel, and bear in mind that lice will retard fattening.

## Incubators in Summer

Beginners should experiment and be ready to use incubators before the fall weather comes. Probably the best time to learn with an incubator is in the summer, when eggs are cheap and the cost of running the brooders is low. It is not difficult to operate an incubator, but there is something to learn, hence the incubator and brooder should be operated as a trial before attempting to hatch for market. Do not delay until the time arrives for hatching chicks for market, as a failure with the first hatch may throw the operator a month behind the market. Now is an excellent time to buy an incubator.

## Shipping in Summer

It is cruel to ship live fowls to market during very warm weather. Do not expect good prices for birds that are tortured on the journey to market. Special care should be taken not to give the fowls any food for at least twelve hours before they are killed, so that the intestines may be empty at the time of death, and so avoid decomposition as much as possible.

Plucking the fowl should not be attempted too soon. If feathers are pulled out while the blood is still fluid, the vesicle at the root of them becomes engorged and the skin spotted. A fowl killed while digestion is going on will hardly keep for market during warm weather. After plucking the carcasses they may be immersed in ice-cold water in order to remove the animal heat, there to remain until cool, and if of choice quality it will pay to pack them in ice and send by express.

## Geese for Market

Geese pay because they require but little attention, are good foragers, are subject to few ailments, and bring good prices if the pure breeds are used, as the pure breeds will reach heavy weights. The old geese make better layers and mothers than the young ones, and can be kept for breeding for years. As old geese are not readily salable in market the young ones only should be sold.

Geese will eat all kinds of young grass or weeds, and they are very partial to purslane, pig-weed, etc. They also find a large portion of their food on ponds, and should not be kept unless near a pond. They need no food in summer, but should be fed twice a day in winter. The Toulouse and Embden are the largest breeds, the latter being entirely white in color. Geese require a dry place at night. In winter they will thrive well on cooked turnips thickened with bran. The feathers

are an item which should not be overlooked.

It is claimed by some that the goose, for the table, is superior to the turkey, its flesh being juicy, while that of the turkey is dry. A young goose is really a luxury when properly prepared for the table.

## A Movable Roost

All roosts should be movable, and the designs shown are intended for roosts which can be easily detached, taken outside of the poultry-house, cleaned, and quickly replaced in position. Fig. 1 illustrates the posts (B B) of the walls, to which a board (A) is nailed, the board being cut out at D D to receive the ends of the roosts (should it be desirable to use more than one roost). Fig. 2 shows the roost, which may be made of two-by-three studding, or any preferred material, the roost being cut out at the ends

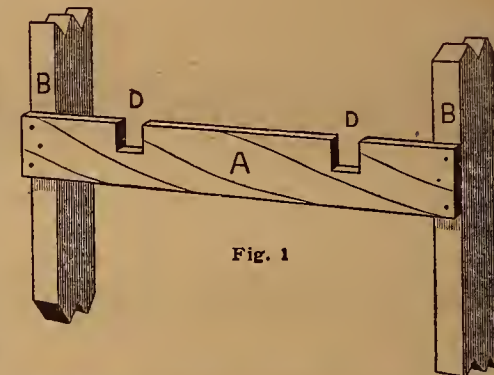


Fig. 1



Fig. 2

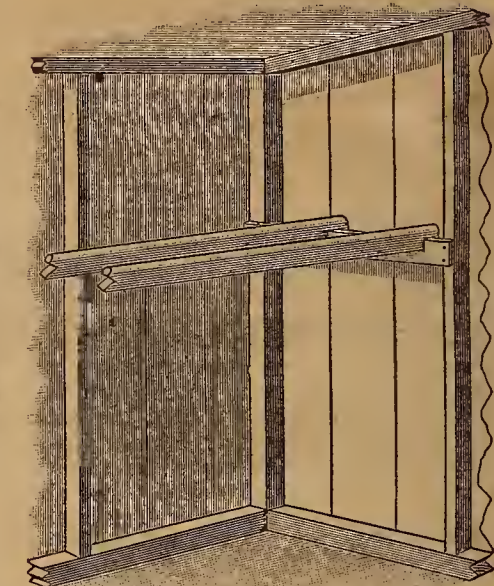


Fig. 3

(C C), each end (C) fitting into D, as is better explained by Fig. 3, in which the roost is in position. It is simply a notched board nailed to the posts of the walls, the roost being also notched at each end to fit in the boards, which are on each end of the house.

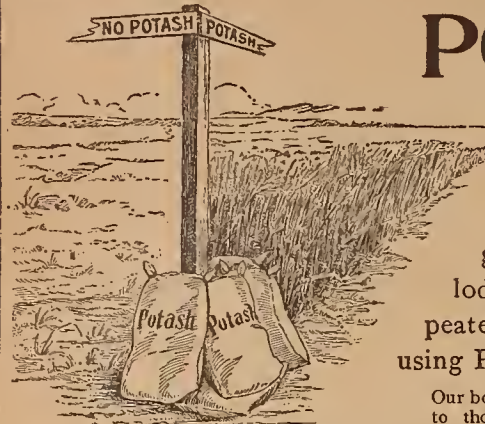
*P. H. Jacobs.*

\* \* \*

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Early Lambs

FARMERS who have raised sheep know the value of January lambs. With little trouble and expense owners of sheep can have fifteen or twenty to market each year. Select a piece of ground sloping to the south or east. Excavate a cellar with door on the open side of the cellar. Make the wall on three sides of concrete, and the fourth of boards lined with building paper. Bank three sides to the eaves with dirt.

The size is to be determined by the number of sheep you wish to have early lambs. For ten sheep a building twelve by thirty feet is sufficient. That would allow ten stalls three by eight feet, and an alley four feet wide the entire length of the shed.

The roof may be of boards or shingles. It may be a shed roof, in which case the high point of the roof might extend two feet above ground, so that hay might be put into the manger from windows. For myself I prefer a V roof, the V of course inverted. It makes a warmer building. The posts should be six and one half feet from bottom to plate. This makes a warm building.

A little closet might be constructed at one end of the alley, walled with concrete and a small stove put in, the pipe-hole made in the outer concrete wall. On extremely cold days a fire lighted here would give an abundance of warmth.

A barrel partly filled with oats should be kept there and a kettle on the stove containing dry oats. If a lamb is dropped in extremely cold weather, put it in the warm dry oats until it is thoroughly dry, then take it to its mother and it will be all right.

Some man might say "this is too much trouble." But one must take trouble to handle \$150 to \$200 per acre land. He must clean his oats and give them a formaldehyde treatment. He must be very particular about his corn for seed. He must spray his potato-vines, his apples and other fruit. No successful farmer of the present day can put in his crops and then spend half his time in a country store, or blacksmith shop "trading lies."

Every man who owns sheep will find that his January lambs are eagerly sought after, and bring fancy prices. The small farmer of diversified industry, who obtains top prices for grain or stock is making more money on the capital invested, than the big farmer with his gangs of laborers and a fortune tied up in farm machinery.

On the board side of the building windows should be eight feet apart. These should be of glass, tight fitted, and for extremely cold nights should have tight doors to shut over the windows outside, so the air could not sift in. The doors should fit tightly. A window, with a slide covering for ventilation, should be in the gable ends near the top. In two weeks the lambs will be strong enough to stand any weather. U. S. ELLSWORTH.

Dairy Characteristics of the Herefords and Devons.

Any breed of cattle may be trained to be useful and profitable for dairy purposes. Nature has given to one and all the property of lacteal secretion, and with it capability of increase or decrease in racial development, according to cultivation or neglect—favorable conditions and circumstances, or the reverse. Great as the contrast between our grazing and dairy varieties of cattle undoubtedly is, could we trace their evolutions far enough back we would find that they have been derived by conformation through many successive generations to diverse tendencies. Lacteal secretion is unlikely to increase very much in any herd so long as the prairie system of cows suckling their young is habitually pursued. Herefords have been bred thus in their own home from time immemorial, and this has caused their bad reputation for milking; but I know where they have had different training they have been found to milk well. In the district in England of which I speak, in letting dairy herds, the owners were accustomed to get as much for Herefords as for cross-breds. One gentleman I once knew there compiled a milk record of the yieldings of sixty of his best cows. The heaviest milker of the lot was found to be Old Hereford, so called because she had a white face and the general appearance of a Hereford. She was in profit for eleven months, and gave an average of fifteen quarts per day for the entire period. Moreover, his second best milker was of the Shorthorn-Hereford cross.

Fresh evidence has recently come to my knowledge that it is only for want of proper training that Hereford cows fail. An agricultural society in England has for several years past offered prizes for the best dairy herds in the district in which its show is held. There was keener interest in the last show than ever before,

Live Stock and Dairy

and no fewer than twenty-four herds were entered, seventeen in the class for those having over forty cows, and seven in the class with less numbers. The merit was so high that after awarding the three prizes offered in the competition of the larger herds, the judges awarded fourth and fifth prizes. What astonished the judges, however, was the fact of being compelled to award third prize to a pure-bred Hereford herd. In the report the judges state, "Mr. White exhibited seventy-four of the best Hereford cows we have ever seen, and with an aptitude to milk seldom found in this very handsome and fine grazing breed. This herd was established in 1819 by the present owner's grandfather, and there is a fair prospect of its going on for generations to come. The cows are of uniform type, large, and in high condition (though only moderately kept), and lastly, and of the most consequence, they are evidently good milkers, and have very well-shaped udders. Among them was a grand old cow sixteen years old, from which many have sprung. She is, or rather was, an enormous milker, and no doubt has greatly influenced the herd in this direction. We had much pleasure, mixed with surprise, at having to award a dairy prize to a Hereford."

There were also three Devons, two in the class for the larger herds, and one which received the third prize in the smaller herds class. In reference to this, the judges said, "Mr. Tozer showed twenty-five very nice full-sized Devon cows with a greater show of milk than is common with this breed."

By this it would appear that the judges harbored the impression, probably a general one, that Devon cows are rarely good milkers. But there have always been a

almost perfect specimens of the North Devon breed, with great length of pedigree, and with such perfect symmetry as to enable them to grace any show-yard in the kingdom; but much as we admired and appreciated this fine herd, we, as judges, considered it out of place when associated with 'dairy herds,' and therefore respectfully passed it by."

Personally the finest herd of this breed I ever saw was one of seventy-seven Devons, not of the aristocratic North Devon type (noted for superb quality, but small), but of the robust, larger variety, a breed specially suited to the locality, which lies high, exposed to more than an average share of wind and rough weather, and certainly of second-class natural fertility, more like down land than the luscious pastures associated in most minds with the pail-filling dairy cow. The cows were all level, large and with a greater aptitude for milk than is usually found in Devons, which claim all the other virtues found in cattle, so that there is no wonder it was considered locally a first-class, useful herd. W. R. GILBERT.

Succulent Food for Sheep

In order to do their best, sheep require more succulent food than any other of the domestic animals. If they are provided with food that contains a large per cent of water they will thrive better than with dry hay, even with good grain ration.—W. E. Raymond.

Scratching-Poles

In dairy practice a good many old methods in use by our fathers could be revived with profit. Such, for instance, as scratching-poles set at an angle of



WAITING FOR SUPPER

great many dairy herds of the breed in Dorset, England. In the early part of the last century, when a great deal more butter was made in that district than now, the breed had a high reputation for dairy property. Youatt admits this, but hit the right nail on the head when he remarked that Devon cows "were more noted for the high quality of their secretions than for large quantity." This had thorough confirmation at a London show in 1884, when the famous prize cow, Myrtle, with a milk yield of twenty-six pounds, received second prize, the cow placed above her being of the Dutch-Shorthorn cross, which yielded over sixty pounds. But the judges, in making their award, remarked that "although the Dutch cow milked so copiously, the milk from the second-prize animal could produce more than double the quantity of butter. While sixty pounds of milk from the Dutch cow could only yield one and one half pounds of butter, sixty pounds of milk from the Devon could produce three and one half pounds.

In regard to two larger Devon herds in the other class, "Mr. Ensor owned fifty superb Devon cows, many of them

45° to fit the backs of cattle of all sizes. Such a device was used by some of the old farmers in New York half a century ago. Cows and young stock are very fond of such exercise if given an opportunity.—Hoard's Dairyman.

You know how the government inspectors are going to work under the new meat-inspection law. They must look carefully into every branch of the business before they put the government stamp on a single can. But that stamp then means: "This meat is all right." President Roosevelt has already given foreign governments the nation's guarantee to that effect.

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### Prosecuting a Swindler

E. A. K., Ohio, asks: "What could be done with patent-right swindling; that is the party is selling the counties for more than their actual worth, by misrepresentation? Will sell as many as he can in one place, then remove to another part of the state. Been in business for five years unmolested. He owns no real estate. Said parties live in the state of Ohio."

Well, several things might be done. He might be arrested for getting money under false pretenses, and possibly under some other provisions of our statute. It would be very proper for someone to bring the attention of the grand jury to such conduct. As he is financially irresponsible, of course, it would be no use to proceed against him in a civil action.

### Liability of Person Driving Cattle on Highway to Unfenced Adjoining Lands

A. E. B., Ohio, writes: "Has a cattle driver the right to let his cattle or sheep run through a property owner's lawn and garden, while driving them along the highway in an incorporated village? Are we obliged to keep them fenced to keep this stock out? Is the cattle owner liable for damages in such a case?"

Every person has a right to use a highway in a proper and legitimate way, that is, he can use it for all purposes for which the highway is intended. The driving of cattle would be a perfectly legitimate thing to do on a highway, and if the cattle should step off the bounds of the highway, the driver exercising ordinary care, the owner of the cattle would not be responsible for any damages. The owner of the land must enclose the same if he wishes absolute protection. There would be no difference in this rule between country highways or village streets.

### Unrecorded Deeds

E. H., Ohio, wishes to know if a deed which has never been recorded is lawful, and if so, for how long?

So far as the rights of the parties to a deed are concerned it is not necessary to have a deed recorded, as the title passes when the instrument is delivered and not when it is recorded; however, as to the rights of third persons this rule is different, and if a person should happen to purchase the property, not knowing of any such deed, he could get a good title and the deed would become void.

### Right of Wife in Property of Husband Acquired by Will

J. N. F., Virginia, writes: "A man dies, leaving his whole estate to two unmarried daughters for life, unless they should marry. In that event, the property should be divided equally between all the children. They have never married, and are now quite old. In the meantime one of the sons has married and died, leaving no issue, but left his estate in fee to his widow. At the death of these two old ladies, what interest will the widow have in this estate?"

Again I am a little at sea from not having the exact language of the will in determining the estate the various parties took under the instrument of the father, but my opinion would be that the son could by his will, dispose of that property. If the son did not leave a will, it is very doubtful whether the widow has any interest, but you had better consult a local attorney.

### Liability of Residents of Incorporated Towns for Repairs of Country Road

G. W. C., Ohio, asks: "Do residents of an incorporated town pay taxes to repair or improve the roads in the township outside of the incorporated town? If not, do they have a right to say where or how the roads shall be repaired or improved in the townships?"

No, residents of incorporated towns are only obliged to pay taxes to the town corporation. The roads outside are under jurisdiction of the township, instead of the incorporated towns in the state government. Of course a person living in a town would have nothing to say or do about the roads in the township. If they own property in the township they might be liable for road tax, but would have no other way than that of persuasion or argument as to where the road tax or work should be placed.

### Right to Land by Adverse Possession

Mrs. W. E. C., Pennsylvania, asks: "What is the law of possession in the state of Pennsylvania? Parties that own land joining mine have recently made a survey and taken possession of a small strip of land that has been in the possession of my parents and myself for fifty years. If their survey is correct, can they hold this land?"

My judgment would be that if you and

## The Family Lawyer

Legal inquiries, of general interest only, from our regular subscribers will be answered in this department, each in its turn. On account of the large number of questions received, delay in giving printed answers is unavoidable. Querists desiring an immediate answer, or an answer to a question not of general interest, should remit \$1.00, addressed to "Law Department," this office, and get the answer by mail.

your ancestors have had possession of this land for fifty years under a claim of ownership, that you would still continue to hold it.

### Failure to Pay Taxes on Lots

T. P., Kentucky, writes: "In April, 1887, I bought two lots in Wichita, Kansas, paying cash for same. I also got abstract of title and warranty deed for same. The taxes were so small that I neglected paying them since 1893. Is there any way I could get possession of these lots without buying them outright? The county officers have their friends, and one of them may have the lots, is the reason I do not write to them."

As you have neglected for so long that which was your plain duty, you are not now in a position to complain, and my judgment would be that you have forfeited your right and title to the lots in question, and if you want them now, you will be obliged to pay for them.

### Right of Railway Corporation to Change the Course of its Tracks

B. B., Ohio, inquires: "Can a railroad condemn a second right-of-way through a farm against the owner's wish?"

Yes, a railroad can appropriate a right-of-way a second time if the judge of the court in which the action is brought was of the opinion that such change was proper and necessary. If there is a bad curve or grade in the old right-of-way, under a modern method of rapid travel, it rather occurs to me that the court would hold that it was a proper and necessary exercise of the right of eminent domain for the corporation to change its course, and condemn a right-of-way for that purpose.

### Devise Under Will

C. E. P., Ohio, inquires: "A. owned two farms. One he earned, the other he received as a gift from his foster father. He has no children. His will gave his property to his wife to do as she liked with it during her life. Can she will it away? Who are the legal heirs?"

From the above statement I would say that the wife could dispose of the property by will or otherwise as she might think proper in her lifetime.

### Estate in Fee Simple or Entailed Estate

E. F. B., Tennessee, writes: "I have a farm in Tennessee that my grandfather deeded to me and my bodily heirs. I was not married at that time, and had no children. Will deed hold to unborn heir? Can I sell my farm and make good deed to same?"

I am not sure of the construction that the courts might place upon the deed where it is given to a man and his bodily heirs, but I am rather of the opinion that such a deed, unless changed by statute, would merely convey to the first person a life estate, the remainder would go to the heirs of his body. It seems to me that the phrase "bodily heirs," is synonymous with "heirs of his body." If this be a true construction, then of course the first person only takes a life estate and could not convey any more. The estate would be what is termed in law an entailed estate.

### Divorce Acquired in Another State—Recent Decision of the Supreme Court of the United States

C. J. B., Ohio, writes: "After many years of married life A. left home and went to another state, leaving wife one half of the value of realty and nearly all household goods. Some nine years after he obtained a bill in another state from which his wife resided, and about a year after married again. What position is he and his second wife in, owing to late ruling of the United States Supreme Court? There are no heirs by the second wife. What should they do?"

The recent decision of the Supreme Court of the United States in Haddock vs. Haddock, and the newspaper reports of the same, and comments made thereon, have created a good deal of discussion and some uneasiness among divorced persons. Much of this is caused by misapprehension of the real matters decided by the Supreme Court. That court did not hold that a divorce granted in one state was invalid in another. What it did hold was that this question was a matter that the courts of the different states could settle

for themselves without infringing upon that provision of the United States constitution which requires that one state shall give full faith and credit to the judicial decrees of another state, that is to say that where a decree rendered in one state is embraced by the full faith and credit laws, that constitutional provision commands that the other states shall give to the decree, force and effect to which it was entitled in the state where rendered. In the case of Haddock vs. Haddock, the wife was a resident of the state of New York, and sued her husband in that state, in 1899, and obtained service upon him. The complaint charged that the parties had been married in New York, in 1868, where they both resided, and where the wife continued to reside, and that immediately after the marriage the husband abandoned the wife, and thereafter failed to support her; that he was the owner of certain land. The answer of the husband admitting the marriage averred that its celebration was procured by fraud of the wife. That immediately after the marriage the parties separated by mutual consent. It was also alleged that during the long period between the marriage and the bringing of the action, the wife had in no manner asserted her rights, and they were barred by her laches in so doing. It also alleged that the husband had in 1881, obtained a divorce in the State of Connecticut. At the trial, the court held that the Connecticut court had no jurisdiction over the wife, who was a resident of New York, and that notice of the pendency of the petition, which was merely by publication, did not bring her within the jurisdiction. This decision of the lower court in so holding that the divorce granted in Connecticut was not conclusive was affirmed by the Supreme Court of New York, and from there taken to the Supreme Court of the United States, and the United States Supreme Court held that the decision of the Supreme Court of New York would be binding in that state. It will be noticed in this case, that the wife had never changed her domicile and that the parties both had never resided in the state of Connecticut. If this divorce of the husband would have been granted in a state where they both had lived together during their marriage, and the wife had gone away, then the decree would probably have been held valid, even though service would have been made upon her by publication, but anyway, almost all states recognize divorces granted in another state, even though service is made on one of the parties by publication. If actual personal service or notice is given, then, of course, the court would have jurisdiction, and the divorce would be binding. Probably the only states in which divorces are effected by this Supreme Court decision are New York, Pennsylvania, and North and South Carolina, and much of the uneasiness caused by this decision exists on paper, rather than actual holdings and decisions of the various courts. If the party in the above question resided in either of the above four states, then the decision of the Supreme Court would be applicable, and the divorce that he had granted to him would not be binding upon the wife.

### Right to Dehorn Cattle—Killing Straying Dogs

C. F. S., Pennsylvania, writes: "I wish you would answer in the law department if a man who has been in practice ten years, but has no diploma, has a right to dehorn cattle and castrate cattle and horses? Has a man a right to kill dogs running sheep on his own farm?"

I do not know that your state has a law requiring particular skill in reference to dehorning cattle. Most states do not, holding the person liable for damages if he fails to exercise proper skill. There is not much doubt about the proposition whether the man has a right to kill a dog that is running his sheep, as it is generally conceded to be the privilege of the owner of property to protect it, especially when it is on his own land.

### Right to Sell Flowers Raised by Yourself

A. A. S., New York, writes: "Will you be kind enough to tell me through your paper, if a farmer's wife has a right to sell flowers she raises on her own farm from door to door?"

Generally where there are any licenses required, they do not reach so far as to

compel persons to get licenses for selling flowers or vegetables, etc., that they may have produced themselves.

### Distribution of Estate

A. S., New York, asks: "If a man dies leaving property, having no will, and leaves a wife and five children, and they all agree without writing to let said property remain as before, for the support of the wife as long as she lives (it has been twenty years, and she is still living), could any one of the heirs have the estate settled up, or at her death would each heir share alike? Two of the heirs care for the mother and have plenty of income from the property to support them. Could they get any more than the other heirs at the mother's death?"

At the death of the wife or mother this property would be equally distributed between the heirs. The fact that some of the heirs have received some portion of the income would hardly affect the distribution on the mother's death, as it is the agreement that it is to be for her support. Unless this contract between the heirs and the mother is in writing any one of the heirs might revoke it at any time.

### Purchase of Property Under False Recommendation

W. F. S., Ohio, writes: "If a man advertises a public sale, and in that sale bill advertises a brood mare to be in foal, and day of sale he being asked when she is due, on or about the 9th of —, and the mare proves not to be in foal, parties buying her with the expectation and understanding, and paying a big price, expecting to get out by raising the colt, what or who should be the loser?"

Unquestionably in the above case the seller would be responsible in damages for the failure of the property to be as he represented it. The fact whether or not the representation was false to his knowledge when he made it, would make little difference, as he received the benefit of his representation in an increased price, and if it was not true he should refund in the way of damages for the failure of the property to be as represented.

### Marriageable Age

E. R., Ohio, writes: "What is the marriage law of Indiana regarding age?"

The marriageable age under the laws of Indiana, is eighteen years for male and sixteen for female. Of course if the parties have not arrived at the age of majority, they must get consent of their parent or guardian.

### Wife's Dower

B. E., Maryland, writes: "My husband died without a will. What is my share of the real estate yearly? Would I get one third of what is raised on the farm; fruit, stock, and produce? If rents are not paid, can I collect back rents with interest?"

Under the Maryland law the widow has a dower estate, that is, the use of one third of the entire real estate during her lifetime, and consequently if the parties among themselves have not divided the estate she would, if all agreed thereto, be entitled to collect one third of all the rent, etc., accruing from the use of the property, otherwise she could have her one third set off to her, and use it to suit herself.

### Who is Commissioner of Land Office?—Line Fence

R. L. E., Pennsylvania, wants to know: "What is the name of the Commissioner of the General Land Office at Washington, D. C.? Can a person compel another man, by law, to fix and repair his part of the line fence so as to keep his stock from trespassing on the land of another?"

I do not know the name of the present Commissioner of the General Land Office, but if you will address a letter to the Commissioner of the General Land Office, he will get it. I am not familiar with the fence law of Pennsylvania, but I should say that you could compel an adjoining landowner to fix his part of the line fence.

### Answer Not Yet Seen

C. L. A., Ohio, writes: "I did not see answer to inquiry in your paper (legal department) that I sent you some weeks ago."

It may not be improper to again say that all queries are answered in their turn. Of course there is a possibility of their being lost, but this does not generally occur. Your query probably before this has been answered, if not, send it in again. Querists must not be surprised if at least three months elapse before they find an answer to their query in the columns of this paper.



An Appeal to Our Millionaires

ONE of the most profound philosophers in the United States, X, contributes an article by the above title to the June "North American Review," urging the possessors of surplus wealth to cooperate in a fairer distribution of capital. He says: "The people may be divided into three classes: Those who have much more money than is good for them, numerically small; those who have perhaps as much as is good for them, a larger class, yet small; and those who have much less than would be good for them, which is vastly larger than both the others together. As each voter has exactly the same voice in the government as every other voter, the laws regulating the acquisition and descent of property must sooner or later conform to the views of the voters of the third class."

He quotes from Daniel Webster: "The freest government, if it could exist, would not be long acceptable if the tendency of the laws was to create a rapid accumulation of property in a few hands. In the nature of things, those who have not property, and see their neighbors possessed of much more than they think them to need, cannot be favorable to laws made for the protection of such property. When this class becomes numerous it grows clamorous. It looks on property as its prey and plunder, and is naturally ready at all times for violence and revolution. It would seem, then, to be the part of political wisdom not to found government on property, but to establish such distribution of property, by the laws which regulate its transmission and alienation, as to interest the great majority of society in the support of the government."

"In the face of the irrepressible conflict," X reminds us, "all other questions under public discussion are of little or no importance compared with this: 'What have I contributed to the common good to entitle me to this surplus wealth?'"

He quotes a conservative writer as saying, "Many of our millionaires are corruptionists, contributors to campaign funds to buy betrayals of public trusts and worse than any pirate flying the black flag of the seas." These ideas permeate our middle class who are not rich enough to be envied nor yet poor enough to be pitied, as well as the great mass of voters who have a bare subsistence.

"Our millionaires, and especially their idle and degenerate children, have been flaunting their money in the faces of the poor as if actually wishing to provoke them to rage.

"The world has moved out of night into day relative to the possession of private property; away from the time of despotism and privilege into a democratic age. The sudden appearance of over fifty labor members in the British House of Commons clearly shows that the men who labor with their hands will at no distant day be in practical possession of the government of that country, while the rapid growth of Socialism in Germany indicates the approach of the same great change there.

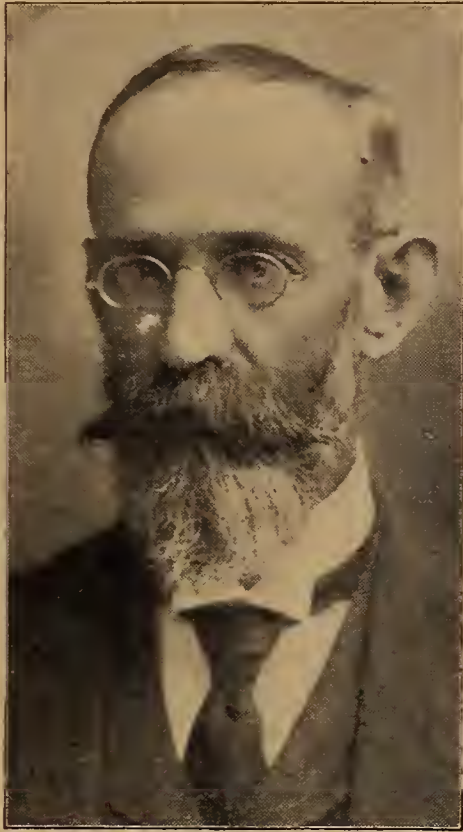
"Now, what are the bulwarks of private property in the imperial commonwealth of New York, where so much of it is situated? As to incomes, nobody will have the effrontery to deny that if the majority of voters choose to elect a Governor of their own way of thinking, and a majority in both houses of the legislature, they can readily enact a progressive taxation of incomes which will limit every citizen of New York State to such income as the majority of the voters considers sufficient for him. It is, if possible, even less likely that anybody will deny that in order to effectually turn every dollar of the property of every decedent into the public treasury at his death, no affirmative legislation is necessary. It is only necessary to repeal the statutes now authorizing the descent of such property to the heirs and legatees of the decedent. It is perfectly apparent, therefore, that there is no ultimate security for a single dollar of private property in New York, and precisely the same statement is true of all other American states, except such as a majority of the voters may decide to be just and wise, both to the possessors of such property and to the community at large. Nor can any protection be obtained from the national government. Even if any constitutional provision stood in the way, it could be removed by the same majority of voters whenever they chose to do so."

T. C. Atkeson

The grange is familiar with the face and name of T. C. Atkeson, Master of West Virginia State Grange, Overseer National Grange, and Dean of the College of Agriculture University, West Virginia. Reared on a farm, he experienced all the hardships incident to that life, together with those imposed by ill

health. By strict frugality and industry he secured a college education, became a publisher and lawyer, when his health broke down completely. For weeks he lay at the point of death, but recovered sufficiently to travel, became interested in the science of agriculture and determined to do all that he could to advance the interests of the farmer. In 1878 he married Miss Cordelia Meek and settled on his father's farm.

He has always taken an active interest in educational and agricultural matters.



PROFESSOR THOMAS CLARK ATKESON

He joined the grange in May, 1882, and since has been connected with every movement for the advancement of agriculture. He has held an office in his state grange from the beginning, has been its master since 1888, and declares that he will not serve if a single ballot is cast against him.

As a member of the state grange legislative committee he prepared the bill creating the State Board of Agriculture, was its first president, and held the office six years. He declined reelection but continued as member of the Board four years longer.

A part of this time he served as professor of agriculture in the West Virginia University, edited a farm paper and managed his farm. Gov. Atkinson appointed him a member of the Board of Regents of the West Virginia University. In 1897 he received every vote save his own, unsolicited, for Dean of the College of Agriculture. As president of the State Board of Agriculture he is also a member of the Geological and Economic Survey Commission.

West Virginia farmers owe a debt of gratitude to this frail man whose activities have brought such good to his state. He is vigorous in defense of his ideals. He cares not whether they are popular or not, but is chiefly concerned in finding the truth. His people love and honor him and advance him because he has proven true to the trust reposed in him.

Cordelia Meek Atkeson

Mrs. Cordelia Meek Atkeson, wife of Prof. T. C. Atkeson, a daughter of Rev. Z. Meek, D.D., is a Kentucky woman with all the charm and grace which that term implies. Rev. Meek was a prominent character in Methodism, and edited the Central Methodist. Mrs. Atkeson had the advantage of a cultured home and companionship. She was carefully educated in the city schools, the Kentucky Normal School, from which she graduated, and the Wesleyan Female Seminary, Staunton, Virginia. She was married at twenty-two, and she and her husband went at once to their productive farm in the Kanawha Valley, where they lived seventeen years. When her husband assumed the duties at the Agricultural College at Morgantown, West Virginia, the family moved there. They spend their vacations on the old farm. Mrs. Atkeson has worked with her husband for the upbuilding of agriculture in their state. Who can measure the influence of the life of this sweet, gentle

The Grange

woman who has devoted talent and culture to the people. Her hospitality is large, her sympathy quick. She is a frail, gentle woman who has borne a noble part without murmur or complaint.

There are four children; the two sons are married and in business, and the two daughters are in the University of West Virginia. Mrs. Atkeson was elected Ceres of National Grange in 1899, Pomona in 1901. She has served terms in various official capacities in her own state grange.

Observatory

Those readiest to express opinions have few safe ones.

"The longer I live," exclaimed ex-President Supcr of the Ohio State University, "I am more impressed that the commandment 'Don't be found out' is the best kept of all."

The average newspaper is an attorney for the prosecution or defense of every policy and individual prominently connected with a policy. It seldom rises to the high and unbiased position of judge. One who reads one paper or one side only is apt to judge by his prejudices, not reason or justice.

*Mary E. Lee*

Observation

BY CHAS. W. SUPER, EX-PRESIDENT OHIO STATE UNIVERSITY

There is no habit that is more important for a country boy to acquire than the habit of careful observation. Of course it is always good to take note of things, but when it is a matter of transients it has not great value. On the other hand, the boy on the farm, who has the opportunity to look at the same objects over and over again, can soon acquire a fund of knowledge that is both useful and interesting. It is true for many things he needs an interpreter. Books can generally be found that will serve this purpose. Yet books are only guides. They usually deal with types, while nature shows us no types but only individuals. Every country boy knows an oak tree at sight. But suppose he were asked to tell the difference between white, red and black oak to a person who had never seen any of them and there were no specimens at hand?

General knowledge and vague ideas are the order of the day with most persons.



MRS. T. C. ATKESON

I know people who have lived in the same house all their lives who are nevertheless unable to tell where the sun rises when it is the farthest north, and where, when it farthest south. I have asked persons who had seen many elephants whether they noticed any peculiarity of the knee-joints of their hind legs, and they all said no. How many persons who have spent their entire lives on the farm know whether pole-beans wind to the right or the left, or whether they all wind the same way. Do hops and beans wind in the same direction? Can a vine that starts to wind toward the right be induced to wind toward the left? Here are very simple laws of nature—how interesting they are and how instructive!

Every farmhouse ought to possess a microscope. Unfortunately these instru-

ments when good cost much money, and even when passable, a good deal. There are so many uses to which such an instrument can be put that fifteen or twenty dollars are well invested. A good triple lens need not cost more than two dollars. However, if the choice is between a microscope and books for the same money, get the books by all means.

My attention was called many years ago to the importance of careful observation by the following story: A man was passing through a wood just after a snow had fallen, when happening to meet another man he asked him whether he had seen a little old man with a short gun and a small dog with a short tail. "Yes," replied the other; but as you must have seen him too, why do you ask?" "No," was the answer, "I did not see anybody. But I supposed a little old man had passed here from the size of the shoes and the short steps. I knew he must have had a short gun from the mark made by the butt in the snow and the end of the barrel against the bark of the tree where he set it down. I was sure the dog he had with him was small from the size of his tracks, and I knew it had a short tail from the mark it made in the snow where it sat."

The same lesson was taught by the following anecdote. When my father was about fifteen or sixteen years old, the story became current among some of his neighbors that in a certain thick wood a man could be seen almost any dark night with outstretched arms, headless, and on fire all over. One day after assisting a distant neighbor in chopping timber he started home through this very wood. When it became fully dark it occurred to him that the headless ghost was right in his path. Though not superstitious he was a good deal scared, but hated to go back. So taking a firm grip of his ax with both hands he moved cautiously forward. When he got near the haunted spot, sure enough there was the apparition! However, as it did not move, he had the courage and the common sense to venture near. When quite close he saw that it was the trunk of a tree that had been broken off about six feet from the ground, and that two dead branches projected almost at right angles near the top. The stump was thoroughly rotten and covered with a kind of mushroom or fungus that to a hasty observer in the dark bore some resemblance to fire. With a few strokes of his ax he felled the ghost (?) to the earth and it was never heard of again.

I remember I was once terribly frightened for a few seconds by a peculiar movement in the starry sky in front of my eyes. Presently however it occurred to me that I had disturbed a spider with the brim of my hat, and that he was kicking vigorously in his broken web which in the dark I could not see.

Every boy should get into the habit of keeping a journal as soon as he can write with some ease. It is not important to keep a daily record, but every Sunday the events of the past week should be jotted down with some care. This furnishes practise in spelling, in writing and in composition, besides the training it gives in doing things systematically. The improvement, if any, that is made is also worth noting. It is often profitable also to observe the change of views that the developing mind undergoes in religion, in politics, in our opinion of men and women and many other things. One is never so sure of a thing as of what one has carefully observed for himself. Sometimes we are glad to know, within at least a day or two, when even a comparatively unimportant event took place.

I was once shown such a record by a man who was eighty years old that he had begun at the age of ten. It filled a dozen volumes more than an inch thick. The most interesting part was the earliest. It showed that even at so early an age he misspelled very few words, but that his handwriting was poor and his composition still worse. There were hardly any punctuation marks, and only an occasional capital letter. The old gentleman remarked: "I don't see how I could be so stupid, for I am sure that I knew everything in the common-school grammar."

I wish every boy and girl could be induced to read and reread the autobiography of Benjamin Franklin, or at least the earlier portions; for some of the later pages are hardly suitable for young folks. Here we have the plain, unvarnished narrative of the career of a boy who became one of the world's great men solely by his own efforts. He was self-educated in the fullest sense of the word. Not only had he the most meager schooling; he had access to but few books. The country has probably few Ben Franklins, even *in posse*, but it has very many boys who could become leading citizens by adopting his methods of using the advantages (or disadvantages) they have for making the most of themselves. It is a wonderfully inspiring little volume.



"WHY Olga, my dear, if you persist in crying all the day long, you will melt away like the April snow before the rays of the sun; and when Ivan returns from the war, he will not be able to recognize you."

"God only knows when he will return," said the young girl, wiping her eyes with her coarse apron; "our soldiers on going to the wars, bid a long farewell to their homes . . . and then, Ivan looks so handsome in his red uniform, that his officers will never give him leave of absence. What do they care? When a soldier is killed, it makes only one man the less; another mother must give up her son, and there it ends!"

"The priest assures me the war will not long be continued," replied the old woman, replenishing her spinning wheel with hemp; "our soldiers must soon put to flight those infidel Turks."

"I trust it may be as you say, mother." Suddenly the sounds of music and singing arose on the air at a distance; by degrees they drew nearer and nearer, and Olga opened the door of the hut to look at the wedding party which was passing through the village. The couple had returned from church, and were going to the husband's home escorted by their young neighbors, who, dressed in their holiday attire, manifested their joy with laughter and noisy glee. Next, proceeding more sedately, came the mothers and fathers; and they, in turn, were followed by the old people, under the guidance of the chief, or senior inhabitant of the village. It was a three-fold picture of life—youth and all its fleeting pleasures, manhood with its steadier department, and old age, standing on the verge of the past, so soon to realize the mysterious future. "They are happy," said Olga, as she shut the door of the cabin, "and I! . . . but Heaven has no blessings for a poor slave!"

"Child," answered the mother in a tone of authority, "do not let us offend a gracious God by our murmurings. Who knows what is in store for us?"

These words had scarcely been uttered when the superintendent (a sort of local bailiff) entered the room. The good old dame, not less frightened than surprised, rose from her seat, and dropped a low obeisance; as for Olga, she hid herself behind her mother. The superintendent had but lately been appointed to his post, and at present his subordinates knew not at what price and by what sacrifices they were to escape his persecutions.

"Andreas Petrowitch," stammered the poor woman, "I am a little in arrears, but I hope to be able to pay you all in a week's time."

The superintendent, without answering, cast a glance round the place, as if he would take an inventory of the miserable hovel, and, perceiving Olga, he made a sign for her to come forward. The young girl obeyed, trembling, without daring to lift up her eyes, and stood before the bailiff, plucking a flower to pieces by a sort of nervous, mechanical movement of her fingers.

"What do you do with this maiden?" said the man, stroking the hair of the terrified creature, as she drew near to him.

"She helps me to spin," answered Marguerite (such was the mother's name). "It was only yesterday—but I beg pardon for troubling you with these details."

"Go on, Marguerite," said Petrowitch. "Yesterday, then," continued the old woman, "she began to work early in the morning, and when midnight struck, it found her still there. She is a good girl, you see, sir, though timid. Olga, look at the gentleman."

But Olga had vanished before the conclusion of the last piece of admonition.

The superintendent's visits became frequent; sometimes he brought to Olga ribbons which he had procured from Moscow on purpose for her; sometimes, changing his tone, he would threaten the mother to sell all her goods in order to pay debts which she did not owe. The girl resolutely declined the presents, and protested that she would never receive anything but from her betrothed. Thus, ruin or dishonor were the only alternatives apparently offered to Marguerite and her daughter; in Olga's place, few slaves would have hesitated; nay, virtue seldom triumphs over selfishness even in those countries where man is not the property of man. But Marguerite did not waver for one single moment; Olga was her hope, her treasure, her life. She prayed God to give her grace in the time of need; then, having sought the village priest, she told him all her sorrow, requesting his advice and his blessing. This ecclesiastic, unfortunately, was one of those lukewarm pastors who sometimes act rightly, not for the love of God, but for the praise of man. He had had cause to complain of the superintendent, and he determined not to let so capital an opportunity pass of being revenged, at the same time taking to himself all the credit of a good deed. He gave Marguerite the sum required by Petrowitch toward the pay-



## Olga, the Russian Slave

ment of her rent, fully assured that the woman's gratitude would lead her to publish his generosity. Not daring to persecute a family patronized by the priest, Andreas concealed his spite, and postponed till a more convenient season the dark projects he was harboring in his breast.

One day, soon after, the superintendent entered the cottage with a triumphant look. Marguerite trembled, as if she anticipated some heavy blow, but she could not muster strength to ask a single question. "Rejoice," exclaimed Andreas, "rejoice, Marguerite; your daughter is going to Moscow! The count has commissioned me to find him a steady, hard-working girl, and your Olga is just the one. She shall go with me."

Upon hearing this, the disconsolate mother threw herself at the feet of the superintendent, beseeching him with tears not to deprive her of the only support of her old age. But sorrow was of no avail upon so hard-hearted a man as Andreas Petrowitch; he coolly replied that he had his orders, that this time the protection of the priest would be quite useless. With sighs and tears Olga begged to be allowed to remain; but the wicked superintendent knowing that she would have no protector at Moscow, declared that she must im-

scarcely dared to hope; for the slave's virtue is generally resignation.

Presently night covered the country with its sable mantle; all was calm and quiet, save the barking of the watch-dogs awoke the echoes of the neighboring forest. As soon as Olga thought that her mother was asleep, she rose gently and knelt at the foot of the bed. After praying for a long time, she approached to look once more on the features of poor Marguerite. The old woman, who had watched the girl's every movement, rose, and, stretching out her trembling hands gave Olga her blessing. "You wish to set out," said she, "to go to Moscow alone; may the angels of God be with you!" Then, tying up a small bundle of clothes in the midst of which she placed an oatmeal cake, and slipping into Olga's hand a few pieces of money, she conducted her to the door of the cabin, where they parted.

The next morning early, Andreas drove up in a droshky, but what was his surprise and anger when he heard that Olga was gone!—gone, no one knew where. He searched fruitlessly every corner of the village, but was at last obliged to depart with the galling consciousness that his plans had been defeated. In the meanwhile, the poor girl was taking her lonely



"I have often rapped at the rich man's door, and been denied a morsel of bread, but I have generally found the poor ready to relieve me"

mediately prepare for her journey. Suddenly the young girl seemed to recover herself, and pressing her mother's hand, said with a resolute voice: "I will go." "That's right," answered the man, somewhat surprised; "I purpose accompanying you to Moscow, and as it is a long way off, I shall have all the time to teach you how to obey." Then, after having fixed the departure for the next morning, he left the house. Olga had formed her plan. She drew from her bosom a silver ring—the present of Ivan, and, kissing it many times, vowed that she would rather die than break her promise to her lover. She respected the will of her master, conveyed to her by Andreas, and without having recourse to man's frail support, she implored the justice of Him who is ever ready to hear the cry of His little ones. At the same time, we must confess that she

way toward Moscow, hiding herself under the hedges, and availing herself of the most sequestered by-paths when she fancied there was any danger of discovery. Despite the little acquaintance she had with the road, Olga journeyed thus fearlessly on all night and till the evening of the next day. Overcome by fatigue, her feet torn by the rough stones, she was more than once tempted to seek hospitality and rest in some wayside cottage, but the fear of detection still withheld her. However, when the second night drew on, the darkness became so intense that she was utterly unable to find her way; dragging herself toward a barn she had perceived at a distance, half dead with fatigue, she threw her weary body on a heap of straw, and slept soundly till the first rays of the morning sun awoke her, strengthened and ready to proceed on her journey.

Olga had just risen and was about to leave, when a deep sigh, proceeding from one of the corners of the barn, struck her ear, and, turning round, she perceived she was not alone. An old man, covered with rags, had apparently sought the same shelter as herself; he was seated on the ground, and seemed busily engaged in repairing his worn-out shoes. A long white beard, reaching almost as low as his waist, commanded respect, and a deep scar divided the wrinkles on his forehead. Olga was filled with compassion at this sight, and, approaching the old man, she offered him to share with her her money and her scanty provisions. "May God bless you, my child," replied the beggar, with a look of surprise. "Old and infirm, I am obliged to beg on the soil I once helped to defend. I have often rapped at the rich man's door, and been denied a morsel of bread; but I have generally found the poor ready to relieve me." He then broke the loaf which Olga had placed into his hand, and they ate their simple repast together. Confidence revived in the bosom of the noble-hearted girl; she related her story to the old soldier, who accompanied her to Moscow, and there they separated.

Everything in the metropolis of the czars was new to Olga, and well calculated to fill her with mingled fear and astonishment. The buildings, the churches, the bustle and crowd of a large city. But she did not allow one single moment to the gratification of what would only have been most natural curiosity, and by dint of inquiries she found out the hôtel of Count Khanersoff, her master.

In the meanwhile Andreas Petrowitch, seeing that all his endeavors to find Olga were fruitless, had been obliged to select another girl from the village, and had then started, he also, for Moscow. When he appeared before his master he did not forget to abuse poor Olga. She was, he said, an idle, good-for-nothing wench, and her unwillingness to work was the only cause of her flight. In consequence of this false statement, he had just received fresh orders from Count Khanersoff, when one of the servants entered, and said that a young girl was below, anxious to see his excellency immediately on urgent business. Andreas had his own motives for wishing to prevent this interview; he felt convinced that Olga was there, and he knew that a young girl fifteen years old, who had not hesitated to take so long a journey on foot would soon justify herself in the eyes of her master.

Accordingly with an expression of mingled disappointment and shame he pushed roughly aside the unwelcome domestic, and muttered something about the impudence of those who wished to intrude upon Count Khanersoff's time; "His Excellency should not be troubled by such people, he should leave them to the superintendent." In fact, Khanersoff had never been accustomed to devote much attention to his own household affairs, and he felt strongly inclined, on the present occasion, to follow Petrowitch's advice, when the door suddenly opened a second time, a young girl—Olga—made her appearance, and, in a paroxysm of grief, threw herself at the count's feet. Andreas turned deadly pale, but soon recovered his assurance. Turning toward Olga, he exclaimed, frantic with rage:

"Have you really the boldness of hoping for pardon after your late disgraceful behavior? You deserve severe chastisement as an example to others who might be tempted to imitate you."

Olga, still kneeling, answered: "I am innocent! mercy is not what I ask. I only claim justice!"

The astonished count looked first at the maiden, then at the superintendent. There was so much dignity in the poor slave, her voice had something so touching, that he felt curious to hear her. Desiring Andreas to withdraw, he bid Olga arise, and listened with evident interest to her simple recital.

"Olga," he said at last, "I am disposed to believe you. But, at the same time, if I do so, I must punish my officer, which I cannot do on your testimony alone."

"My lord," the girl replied, "the priest knows that I am innocent. Had I been guilty I would perhaps not have come to offer myself for punishment. My mother is old and infirm; I am her only consolation, and although separation from her is to me a severe blow, yet I would have obeyed; for I am aware that even my will belongs to you. The sole motive which induced me to venture so far alone was the anxiety to escape the persecutions I dreaded on the road, and I felt convinced that you would never either encourage or even allow toward one of your serfs the wanton cruelty of such a man as Andreas Petrowitch."

The count conducted Olga to his wife, who highly approved of her conduct, and for a couple of days they interested themselves about the poor girl; then she was forgotten, and at the end of a month sold to a German lady whose husband had perished in the cause of Russia. The new



mistress of Olga had been very handsome, and like many women whose hearts are empty and unfeeling, she did not like to grow old; she would willingly have given her titles and fortune for the youth and grace of Olga. From mere spite she made her cut off her hair, and instead of the bodice, which displayed her figure, made her wear a coarse blouse. The miserable slave regretted the cabin of her mother. The luxury which reigned in the house only served to remind her that she was the property of another. The harder she was treated the more she tried to please; sometimes her gentleness would touch even her unkind mistress, who said at such times:

"Olga, if you were not so awkward I should get to like you."

She tried to smile, thanked her mistress for her kindness, and said she would be happy if she could give satisfaction. But when this woman was in a bad humor she abused her, ordered her to cast down her eyes when she passed before the mirror, and never got tired of telling her that slave as she was, she had ceased to be a woman, and had no right to a thought beyond her mistress' service. If Madame Bartsch sometimes made and received visits, that was Olga's time for rest. She would shut herself in her room, take off her new clothes, and, putting on her peasants' dress, give herself up to dreams of her childhood. Her mother, her youthful companions, the sports of the village, but above all Ivan, presented themselves to her mind, and she lived in a dream of the past; but presently the sound of the bell would wake her from her reverie, and obliged again to put on the hated dress, she was transformed into a servant.

Sometimes she used to say to herself, "My mother does not know even if I am living, perhaps Ivan is dead, but, if not killed, he is dead for poor Olga."

One day she formed a resolution to starve herself; she fastened the ring given her by her betrothed upon her heart, and knelt down to pray for strength to finish what she desired. As she prayed her mind became more composed, she was ashamed of doubting the goodness of the Almighty. Many tears came to her relief, and she rose from her knees, prepared to suffer and to live. Suddenly she cast her eyes upon a newspaper, and, after looking at it for a long time, exclaimed, "If I could but read, I should know what passes in the army," and then, as if inspired, she exclaimed, "I will learn to read, I know I shall succeed." This hope seemed to give her new force, and the difficulty only served to make her desire it more. After reflecting for a long time, she was roused by the sound of music, and heard someone singing in the street a well-known air; she opened her window cautiously, and saw a wandering singer surrounded by a group of young girls. The Russians are passionately fond of music; nearly all their airs have a plaintive character; the songs of the slave resemble their sad position; and the poetry of the north in its national character is as somber as its institutions.

Olga ran hastily into the street, chose two or three of the songs she knew by heart, marked them that she might know each one separately, and returned delighted, crying, "Thank God! I shall learn to read." She carefully hid her treasures, those love songs which later would teach her the fate of Ivan. As soon as night came she lighted her lamp, and, kneeling on her bed, tried to discover in the letters the sounds of the words she knew by heart. At first she confounded the signs, her ideas were indistinct, but she was determined to succeed, she felt that she should succeed, and she slept soundly, for her heart was full of hope. The following night she resumed her task with the same perseverance; she thought she was sure of several words, and seeking the same expressions in different verses, she recognized them with the greatest delight. The rhyme aided her in her study; she understood that the same sounds must be represented by the same signs. At length, after twenty nights of persevering toil Olga has deciphered a page. Olga knew how to read! Henceforth she had at her disposal the key of human knowledge; but Olga's ambition is not satisfied with reading a newspaper.

From that moment a change took place in the mind of the young girl; she reflected upon all she saw; upon herself and her own destiny. She asked herself why she should be the slave of a capricious woman; her whole soul revolted at the idea.

She felt that God alone had a right to dispose of her fate, and her mind was deeply shocked at the view of her own degradation; but the consciousness of her miserable destiny only made her more wretched, and she often asked herself if her former ignorance was not preferable. Yet in the midst of her trouble she had many sweet moments, for she had taught herself to copy the letters she had learned to understand; that task was much more easy than the former. However, she hid her knowledge as carefully as another

could have done a fault. Her mistress, she knew, would punish her for daring to achieve her intellectual emancipation. She read with avidity all the books within her reach, and the newspapers especially afforded her great delight. Thus her affection for her betrothed, which had been the indirect cause of her suffering, was also the source of her consolation, as it had caused her to undertake the extraordinary task of teaching herself to read.

One evening, agitated by an inexplicable presentiment, as she took up the journal, she began reading the news from the theater of war, and found with intense delight a bulletin detailing an account of a recent victory gained by the Imperial Guards; the corps of the Hussars of the Guard, surprised at first by the enemy, were compelled to retire; but, soon rallying, they completely routed the Turks. The Russian colonel owed his life to the valor of a young soldier who had thrown himself into the midst of the ranks to save him. The brave Ivan was decorated with the Cross of St. George, upon the field of battle. Poor Olga could read no more, her tears and her sobs suffocated her, and exclaiming "It is he," she fell senseless on the floor. At the noise of her fall, her mistress hastened into the room; she beheld Olga without consciousness. A small lamp was burning near her bed; on the table were several books, and the newspaper still remained in the grasp of the young slave.

Curiosity rather than any feeling of compassion led her mistress to help her; presently she recovered, and her first word was "Ivan." Her mistress questioned her with affected kindness, in order to surprise her secret. Olga was on the point of telling her all; she had such need of someone to whom she could open her heart, but one look at that cruel face told her that she would be betrayed. She had the courage to keep her own counsel and refused to answer any question; the betrothed of Ivan could not fear. Instinct, which is a sort

great attention by Olga, in the hope of discovering how she might attain her liberty; she had no idea at the time that she was soon to furnish one of those rare examples she had learned from its pages. The poor girl was put in prison, and a loaf of black bread and a jug of water placed beside her; the next day she was taken to receive her sentence along with several other unfortunates.

In these sort of investigations justice is soon administered; begging, thieving, and often courageous insubordination are alike punished with the whip, the knout, and the prison. Olga alone remained; the officer, knowing her mistress was a person of consequence, had promised her not to spare the slave, for he said, in a harsh tone, "You have been stealing from your mistress."

"God is my witness," said Olga, "I never had an idea of theft."

This reply appeared to strike the judge; "I must believe your mistress rather than you," he replied; "here is the act of sale which constitutes you the property of her who accuses you."

"Allow me to look at it," said Olga.

"What would you do with it?"

"See if it be all right."

The astonished officer allowed her to take the paper. She looked at it with attention. Suddenly her face assumed an expression of delight. "Thank God!" she cried with indescribable dignity, "I am free!"

"You are free?"

"Yes, I am; this act has not been renewed within the year."

"Where did you learn all this? I believe you are right; however, the accusation of theft still remains."

"I shall be judged as a free person, and my innocence will be proved."

"She knows as much as a secretary of the Senate," muttered the judge; and he went out to consult those more learned than himself in such matters. He soon discovered that the slave was right, and

soff. All my relatives died in the service of the Czar Alexander. My mother only survives, and she is old and infirm. I was sold to Madame Bartsch; while I was in her service the desire I had to know what had become of my lover made me determine to teach myself to read. My mistress accused me of robbery in order to punish me for having executed my project. It is now fifteen months since I was sold, and I can prove that the deed of sale is not according to rule. That being the case, I belong to the Emperor, and I supplicate Your Highness to see justice done to a poor girl who places herself under your protection.

OLGA."

It is but just to the Russians to say that when anything strikes their attention, they neglect no means in order to bring the person or thing prominently forward. Somonokof, the father of Russian poetry, was the son of a fisherman, and, not to name the many who sprung into notice from the caprice of a despotic monarch, there are many eminent men among them who have risen to fortune solely through their own merit.

The governor was exceedingly curious to see the young girl whose letter was so simply touching. He showed the letter to several of his friends and amongst them to Count Khaneroff, the former master of Olga, from whom he heard the details of her former history, which only served to strengthen his interest. At last he determined to render justice to Olga, and to give at the same time a salutary lesson to the Muscovite nobility. To this effect he invited all the people of any note in the place to spend the evening at his house.

The assembly was very large; the prince took his place, surrounded by his family; on either side were ministers, senators, officers, and high functionaries of the state; noble and elegant ladies added interest to the scene, and most of them were inquiring what could be the motive of the ceremony.

At a sign from the prince, Olga was introduced. There was a great silence; the governor advanced to meet the young slave, and the whole assembly rose *en masse*. Olga was for a moment bewildered by the scene. She covered her eyes with one hand, while the other was pressed tightly upon her bosom, then meekly bending her head and saluting the company, she looked up with modest confidence. A murmur of approbation ran through the hall.

"Olga," said the governor, "you have asked justice from me; if I listened to my own heart only, from this moment I should declare you free and innocent, but the justice you invoke must be obeyed, and I am obliged to question you; you, I dare say, have no fear of the result, but first let us listen to her who accuses you."

Presently Madame Bartsch was placed face to face with her who only a few days before, had been the slave of her caprices and obliged to obey her slightest whim. Frightened by the assembly in which she found herself, at first she stammered out a sort of apology, then getting more confused, at last confessed that the only crime of Olga was that of raising herself above her condition by learning to read elandestinely, and that, she added, looking around her, must be dangerous for the aristocracy.

"The deed of possession is not according to law," replied the prince, in a severe tone, "and since the question of theft is set aside, this young girl is at liberty, and certainly," he added, "she is well worthy to be so. But her honor has been attacked; she has a right to reparation, which I fix at two thousand rubles, which you will have to pay her."

"My Lord," said Olga, "you have declared me free and innocent; I desire nothing else. My poor mother will learn to bless you."

"Your mother is at liberty also," said the Count Khaneroff. "Your mother should not remain a slave, were she the last upon my estate!"

"And I," said a colonel of hussars, who advanced with his arm in a scarf, "I have a debt of gratitude to her lover; allow me to have the pleasure of uniting them." At these words he presented to the governor a young ensign, who advanced with a resolute air, and respectfully raising his hand to his shako, remained standing in strict military attitude.

The virtuous Princess Galitzin gracefully taking off her velvet toque, held it round to the assembly, and in a few minutes she had gathered enough to form a comfortable sun for the young couple. The two lovers had thrown themselves into each other's arms, and did not hear a word of the felicitations addressed to them.

When the first emotion had a little subsided, the prince demanded a moment's silence, and addressing the nobles who were present, said, "Let all who possess slaves remember that the kaftan and the serge may sometimes cover noble hearts who are capable of great things, and when he is inclined to punish for small offences, let him think of Olga and Ivan."



"The astonished officer allowed her to take the paper"

of second sight to the slave, taught her that it was better to be silent. Presently her mistress was tired of interrogating her, and after the strictest search discovered that she had learned to read and write.

"You must have very bad intentions," said her mistress, in an angry voice, "since you dare not own what you have done, but the law shall force you to tell all."

She sent for an officer, and declared that her slave was corresponding with persons of bad character, and had stolen several things from her. Poor Olga was taken to the prison of the district, having no prospect but that ignominious chastisement, which destroys both soul and body—which too frequently changes vice into crime, and error into despair. Among the books which Olga had read, was one containing a collection of laws; that book, though little attractive in itself, had been read with

his manner was speedily changed. He resolved to inform the government at Moscow of this strange event. In the hope that a part of the interest Olga could not fail to inspire would fall upon himself, he affected an extraordinary sympathy for the girl and wrote a circumstantial account, wherein Olga was described as a young girl of uncommon learning, who had been unjustly accused by her mistress.

While he was waiting for the result of his communication he took upon himself to soften the rigor of her captivity, and even advised her to send a memorial to the governor. Olga could not understand how it was that this severe man had become her protector, but believing for the time in his generosity, she wrote the following letter to the Prince Galitzin:

"I was born the slave of Count Khaner-



## The R. F. D. Auto

FROM official tests recently made by the Post Office Department of the adaptability of automobiles to rural-free-delivery service, it would seem that the "old gray mare" is again to lose her usefulness in that respect. The particular motor cars used were buckboards of four-horse power, with a wheel gage of forty-two inches, propelled by a single cylinder air-cooled gasoline engine, the cars each weighing about six hundred and twenty pounds. Three routes, which by ordinary horse conveyance took a little over seventeen hours to serve, were fully and satisfactorily covered by the motor cars in less than nine hours. The average cost of fuel consumed in operating the test machines was computed to be less than 11-10 cents per mile.

The adaptability of motor transportation to the rural service having thus received favorable demonstration, the question of its practicability as applied to all sections of the country remains a matter for consideration. The element of the original cost of the motor car is one which will have to be passed upon by the rural carriers themselves, inasmuch as they are required to furnish their own mode of conveyance, which is included in their maximum annual salary of \$720.

## Gasoline Don'ts

THE gasoline stove has become of such universal use, and especially in the country, that statistics relative thereto as prepared by Mr. H. D. Davis, State Fire Marshal of Ohio, will be mighty good things to read and reflect upon.

Don't fill the stove's reservoir while the burner is alight. Vapor of gasoline, being heavier than air, will reach the flame, and the flash will so frighten the filler that more gasoline will be spilled and the room instantly filled with flame.

Don't fill the reservoir quite full, for gasoline expands much more than water when it becomes warm and is likely to force open a seam in the reservoir.

Don't fail to turn the burner shut before filling the reservoir, for the fluid leaking through it will make a vapor which will set on fire one who strikes a match to light the stove.

Don't allow too much fluid to flow into the burner or fail to close it tight when putting the fire out.

Don't pour gasoline from one vessel to another in a room in which there is a fire or light, because the invisible vapor of gasoline will be drawn to any near-by fire, lamp, candle or gas-jet.

Don't fail to watch closely for leaks in reservoir or burner, because gasoline, being but two thirds as dense as water, will exude through a smaller hole. Remember, too, that when the leak is small there is no drop or damp spot anywhere to show its existence, because the gasoline vaporizes as fast as it exudes.

Don't slop the stuff, for it is more dangerous than powder. Three fourths of the stove accidents occur while filling the reservoir.

Don't keep gasoline in any jug or in a can larger than two gallons, because it is difficult to pour the thin stuff from either without spilling it.

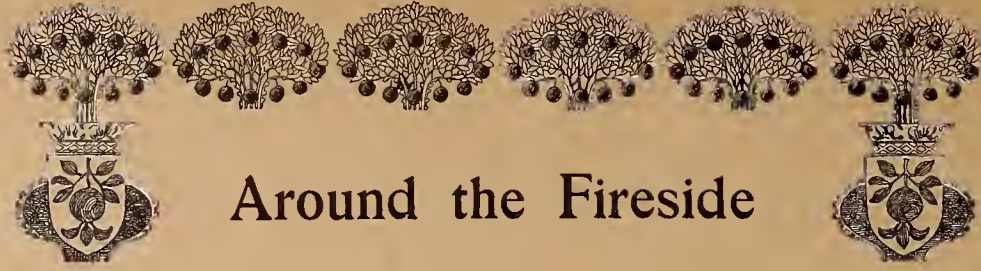
Don't get your gasoline and kerosene cans mixed. That error cost two lives in Ohio last year.

Don't leave any gasoline can open, because currents of air draw out the vapor. The reservoir of every gasoline stove should be outside the building, the feed-pipe passing through the wall. If so placed, heat from the stove cannot burst it, a leak is harmless and vapor cannot ignite while it is being filled. The stove should be fixed to a permanent foundation so that it cannot be set against any inflammable material.

All gasoline stoves should have bottom and three sides closed to prevent combustible material from reaching the flame, and the main burner grates should be two feet from the floor. Finally, don't hunt the source of an odor of gasoline with a light. The result of finding it is always instantaneous and disastrous.

## Richest People in the World

IN the eastern part of Oklahoma lives a band of people said to be the richest, per capita in the world. They spend their income with recklessness, then await the coming of more gold from their coffers in Washington. These people make up the Osage tribe of Indians, and according to "Sturm's Statehood Magazine," their reservation comprises 1,470,058 acres, and covers one of the richest parts of the mid-continent oil-field; and there is every indication that rich coal deposits and minerals in paying quantities may one day bring great returns. The income of the Osage Indians is de-



## Around the Fireside

rived from interest on the large amount of money held in trust for them by the government, in addition to returns from grazing leases, royalties on oil and gas and permits paid by non-residents. The total income for the tribe for last year after deducting expenses of schools and agency, was \$668,000.

By a treaty with the Osages in 1825 the government acknowledged a liability of \$69,120, drawing an interest of 5 per cent, to be used annually for educational purposes.

By the fulfillment of successive treaties, with obligations therein incurred, sale of lands, etc., the amount of money to Osage credit in the national treasury reached, on June 30, 1905, a total of \$8,473,963, belonging to 1,983 Indians, as represented on the rolls for the May payment of this present year.

Add to this a division of almost one and a half million acres of land, and who is more fortunate than the ease-loving Osage, with his inherited possessions of 750 acres of land per capita and a \$350 annual income which brings to no Indian, be he infant or aged, the slightest responsibility, even in the squandering of it.

The only employment of women, aside from customary family duties, is a little bead-work. However, the full-blood family that does not own a sewing machine is rare; and the neatly made garments worn under the blankets attest that these machines have hummed lively tunes.

Most full-blood homes are small, few having more than three rooms. In some cases one room will cover the needs of three families. Grips, telescopes and trunks do double service of holding clothing and forming partitions. Bed-clothing is folded and piled against the wall during the daytime.

Gambling is a vice which is common to perhaps half the tribe, women often being worse than men. Whisky has not claimed a great number of victims, but the condition of those who are drunkards is pitiable.

## The Death Penalty for Stoessel

GENERAL ANATOLE STOESEL, the defender of Port Arthur, and whose death has been recommended by the commission appointed to investigate the surrender, has had a remarkable and interesting career. For nearly a year he was one of the central figures in the Manchurian War. Before winning renown in Eastern Asia he had fought against the Turks at Plevna and at Schipka Pass, and had won promotion in the Turkestan campaigns. When the Boxer outbreak took place in 1900 he headed the Russian contingent for the relief of Peking, and was the first Russian officer to enter Tientsin. When the campaign ended Stoessel was made a major-general, and was stationed at Port Arthur and began strengthening the works there, little dreaming that within a few years he would have to defend them against the legions of the mikado. When the war with Japan broke out he was made commander of the fortress. The general was born at Orenberg fifty-seven years ago, his father having been a prominent merchant. He was educated in the imperial military school, and after joining the colors became noted as a serious military student.

The surrender at Port Arthur, for which General Stoessel has been condemned to be shot, was made January 1, 1905, when no reasonable hope remained that the fortress could withstand the assaults of General Nogi's legions. Stoessel found himself hemmed in on all sides by both land and water, for the gun fire of the Japanese from 203 Meter Hill, which they had captured on the preceding November 30th, had practically sunk all the Russian war-vessels in the harbor.

It was said at the time that Stoessel should have continued the defense, and the developments after the surrender of the fortress surprised some of the military critics. For instance, at the transfer of prisoners to the Japanese the number of able-bodied men turned over was 24,369, of whom 878 were officers. Be-

sides these, over 10,000 wounded men in the various hospitals came under the charge of the conquerors. The official reports further showed that the serviceable guns surrendered numbered 528, while of cannon ammunition there remained in the fortress 206,734 rounds. The small arms given up to General Nogi numbered 36,598, and the small-arm ammunition totaled 5,436,240 rounds. Millions of pounds of supplies also came into the possession of the Japanese.

Dating from the time that land communication was cut off, the length of the Port Arthur siege was 218 days.

## Refuse to Accept Fortunes

THERE are so very few men in the world who would refuse the bequest of a fortune for conscience' sake that the example cited by the London "Tid-Bits" becomes especially interesting. Herr J. Brengwin was a young German bank clerk, employed at a modest salary. He became entitled to a fortune of very nearly £100,000 under the will of an uncle of whom he had scarcely ever heard, and who made him his sole heir. This young man became aware that his uncle had amassed his fortune by usury. Young Brengwin refused to accept a penny of the estate, resolutely returning to Berlin and getting himself reinstated on his old stool at the bank.

What was perhaps the largest fortune ever refused for conscience' sake was that from which Frederick N. Charrington, the famous temperance advocate and religious worker in the East End of London, turned aside. Mr. Charrington was entitled to a share in his father's great brewery business—one of the largest in London; and it is estimated that the share he refused was worth £1,250,000 when he made up his mind that he would not accept it.

The story is told of how he was led to make his momentous resolve. He chanced to be standing outside a public house in the East End when he saw a drunken man shot through the doors into the arms of a wretched-looking woman who was patiently awaiting him. The drunkard struck the woman and heaped the vilest abuse on her without any apparent provocation; and as they slouched away Mr. Charrington, chancing to glance up, saw his own name in large gilt letters on the public-house sign. It was one of the brewery's tied houses.

Such was the impression left by the incident upon Mr. Charrington's mind that he vowed thenceforth to have no share in the trade which was productive of such results, but instead to devote himself to the cause of temperance and rescuing the outcasts of East London, a work he has at the utmost self-sacrifice steadily pursued ever since.

"How much do they pay you for wearing that bit of blue ribbon?" sneeringly inquired an impertinent young man of Mr. Charrington on one occasion.

"As nearly as I can make out," answered the reformer, with a bland smile, "it costs me £20,000 a year."

## The Vindication of Dreyfus

AN INTERESTED world has anxiously followed the details incident to the vindication of Major Alfred Dreyfus. The culminating event of Dreyfus' uphill fight for right and justice occurred on the 21st of the past month at Paris, France, when the Major in full uniform of his rank received the cross of Chevalier of the National Order of the Legion of Honor, which ceremony occurred in the courtyard of the military school, and was rendered doubly impressive from the fact that it was on this very spot where the buttons and gold lace were stripped from his uniform and his sword broken in two twelve years ago. Few men in history have battled as successfully against so great odds as has Dreyfus. There are many recorded who have struggled heroically for justice, but have died before it was attained. All America rejoices with the good people of France in removing the awful blemish from their national military history.

## A Word About Advertising

There are two ways to run a farm paper. One is to get all the fake advertising you can, pocket the ill-gotten money, and let your readers be skinned. The other is to think of your readers' interests all the time and admit only honest advertisers to your pages. FARM AND FIRESIDE thinks the latter is the better way and accordingly it refuses each year many thousands of dollars worth of advertising that it cannot recommend to you, so you may feel perfectly safe in writing to the honest merchants who solicit their trade through its columns.



THE MOWER

Photo by A. J. Swanson



Heroines of the Revolution  
[CONTINUED FROM LAST ISSUE]

AT CHERRY VALLEY the most wanton acts of cruelty were perpetrated. The murder of Jane Wells was an instance of the most savage ferocity. "She was a young lady, not distinguished for her personal beauty, but endeared to her friends by her amiable disposition and her Christian charities; one in whom the friendless found a friend and to whom the poor would always say 'God speed thee.'" Fleeing from her house, she tried to hide behind a woodpile, but was pursued by an Indian. As he approached he deliberately wiped his bloody knife upon his leggings, and then placed it in its sheath. Drawing his tomahawk, he seized the girl by the arm, and, despite her pleadings and the efforts of the servant who had come to her aid, he struck her to the earth. Mrs. Campbell, who was carried off by the Indians and kept in their village all winter, endured the anguish of having all her children taken from her, even to the infant that was torn from her grasp, its piercing cries coming back to her until they were lost in the distance. With great fortitude the bereft mother set herself the task of being useful to her captors, and succeeded so well that she won their favor. An Indian promised to give her a cap as a token of friendly feeling. He pulled from behind a beam a cap of smoky color, and told Mrs. Campbell that he had taken it from the head of a woman in Cherry Valley. She at once recognized it as having belonged to her friend, the unfortunate Jane Wells. It had a cut in the crown made by the tomahawk, and was spotted with blood. Though she shrank from the murderer with horror, Mrs. Campbell took the gift, and returning to her cabin, tried to wash away the blood-stains, intending to give the cap to the victim's friends, if any of them had escaped the massacre. This heroic woman was detained by the Indians for a year, but had the joy of being reunited with her children, all except one, who was with a branch of the Mohawk tribe. In June she was sent to Montreal, and there found the missing child, a boy seven years old, whom she had not seen since the day after the massacre at Cherry Valley. He had forgotten his native tongue, but remembered his mother, and expressed his joy in the Indian language. At Montreal the exchange of prisoners was effected, and in the fall Mrs. Campbell and her children reached Albany, where Colonel Campbell awaited their arrival. They remained there until the close of the war, when they returned to Cherry Valley, and began the world anew. Their lands had gone to waste, were overgrown with underbrush, and all else had been destroyed. They had no shelter, but hastily erected a log cabin. In the following summer a more comfortable log house was built, and here General Washington was entertained on his visit to Cherry Valley. Presenting her sons to him, Mrs. Campbell told the general that she would train them up to the service of their country should their country ever need their services.

Two sons of Esther Skinner went forth to conflict, and were never again seen by their widowed mother. With her six surviving children she hastened to the water-side, to escape by boat. The little ones, half destitute of clothing, "were ready to cry with the anguish of their bruised and lacerated feet, but the chidings of the wary mother, and the fear of being heard by the lurking savage, repressed their weeping, and made them tread in breathless silence their painful way." After traveling one hundred miles by water and nearly three hundred by land Mrs. Skinner reached her former home in Connecticut, and in narrating her experiences could be grateful for the shelter of "nice barns, with clean straw, where my children lodged very comfortably."

The heroism of Mrs. Steele, mother of gallant John Steele, makes a pretty tale, well worth the telling: When the coming of the enemy was announced, Mrs. Steele was engaged in combing the captain's hair. He boasted a remarkably fine head of hair. It was very long and of raven blackness, and was usually tied in a queue. John's important services to the Whig cause, employing him both night and day, had of late left him little leisure for attention to his locks; they had been long uncombed, and probably showed very plainly the neglect they had experienced. The personal appearance of her son was a matter of pride to the matron, only less than her delight in his gallant conduct. While thus occupied, they heard the sharp crack of a rifle, followed immediately by Lockart's warning shouts, and the screams of the young girls who had been stationed in the field. In a moment after, several guns were fired in quick succession, and the girls were seen running toward the house, while the two divisions of the enemy, at no great distance behind them, could be



Around the Fireside

perceived advancing through the standing corn. Not an instant was to be lost; yet such was the effect of sudden surprise on the brave men who, only two days before, had been taken unawares on Fishing Creek, that they seemed utterly at a loss what to do. Mrs. Steele alone retained perfect self-possession. Starting up, she called to them, "You must fight!" but directly, seeing the confusion that prevailed, she shouted an order for them to "clear themselves" as fast as possible. She urged her son to mount his horse at once, and save the public papers in his charge, while she pulled down the bars to let him out with his men. John was quick in all his movements, and it may easily be conceived that no time was wasted. First in the saddle, he spurred his noble horse toward the bars, which he cleared at a bound—his mother having had no time to let them down—and galloped off. He was followed by the greater number of his men, for whom Mrs. Steele removed the bars as fast as she could; some, however, were slower in getting off, and paid the penalty of their delay, being now exposed to the fire of the advancing Tories.

About fifty guns were discharged at the bars, and two of the Whigs fell dead from their horses, bearing Mrs. Steele under them to the ground. One who could not get his horse, in leaping had part of his foot shot off. Another's hunting shirt filling with the wind as he rode, was riddled through and through with bullets that missed his body. Captain Steele, determined to cut his way through the assailants, rode foremost up the lane at full speed, his long hair, unfastened, streaming in the wind, his rifle in one hand, held high above his head in defiance of the foe. He was closely followed by those of his company who had escaped. The Tories, startled by the fury of their onset, gave way and scattered from the road, nor were they able to rally till the fugitives were beyond their reach. The Whigs who were then taken prisoners were carried to Camden; one or two died in the jail there, while others languished for seven months, suffering incredible cruelties.

Meanwhile the first thought of Mrs. Steele—as she struggled to release herself from the weight of the dead bodies, rising from the ground covered with their blood, her dress pierced in different places with bullet holes—was for "John and the papers." When she heard they were safe, she burst into an exclamation of thankfulness, and as she was fortunately unhurt, turned her attention to the relief of others. The Tories, enraged at their disappointment, with one accord turned their course to Mrs. Steele's house. This they burned to the ground, and destroyed her property of every description, where they could find anything belonging to her.

The captain often related this adventure, and said that while flying along the lane with his hair streaming, he thought of Absalom, and vowed, if he escaped his fate while passing under the trees, to sacrifice the hair which had brought him into such peril.

[TO BE CONTINUED IN NEXT ISSUE]

Fate of the "Texas"

THE battleship "Texas," which from the very day of its launching seemed to have been pursued by a hoodoo, is destined to inglorious duty for the remainder of its days as a station ship at the United States Naval Station, Charleston, S. C. The ill luck that followed the "Texas" was indeed remarkable. It was while moored to the quay wall at the Brooklyn navy-yard that an open sea-cock let the water in the hull, and when the "Texas" had swallowed an overload the fighting machine sank. Uncle Sam quickly had the ship raised and restored to fighting trim.

Mishap after mishap seemed to strike the battleship, but the hoodoo was cast off and the "Texas" becomes best known by its glorious performance before Santiago, Cuba.

"Patient All Day"

THE late Mrs. A. T. D. Whitney wrote a great many delightful and wholesome books for the young. They were stories that influenced their readers for good. They helped to create and develop character, and the writer who does this serves a noble purpose. Mrs. Whitney died last March, but she will live long in the affections of many who loved

her, and her written words have created an undying influence for good. Mrs. Whitney wrote some poems of great beauty. The one entitled "Patient All Day" has a wealth of fine and noble feeling in it. It is as follows:

Give me joy, give me joy, O my friends!  
For once in my life has a day  
Passed over my head and out of my sight,  
And my soul has naught to unsay.

No querulous word to the fair little child  
Who drew me from study to play;  
No fretful reply to the hundred and one  
Who questioned me gravely and gay.

No word to the beggar I fain would take  
back,  
No word to the debtor at pay;  
No angry retorts to those who misjudge,  
And desire not a nay, but a yea;

No word, though I know I remember them  
all,  
Which I would, if I could, e'er unsay.  
Give me joy, give me joy, O my friends,  
For patience that lasted all day.

Mrs. Whitney died aged eighty-two years, having been born in Boston in



MRS. A. T. D. WHITNEY

1824. She did not write much for publication until she was about thirty-five years old, and it was not until then that she thought seriously of devoting herself to literature. But a woman who could write as pure and helpful a story for girls as "Faith Gartney's Girlhood" certainly had a clear call to write, and publishers were eager for Mrs. Whitney's work after the publication of this very successful book. Then followed books like "We Girls," "Leslie Goldthwaite," "Acutey Street," "Friendly Letters to Girl Friends," "A Golden Gossip," and a great many other books that may not have been of the highest literary value, but that possessed a quality that some books of great value do not have, and that is the intrinsic value of helpfulness to the young. Writers who send forth books of this kind are so few that it is a great loss when one goes from us.

Mrs. Whitney's little poem about having been patient all day has a lesson in it for us all. He who is really patient all day achieves a victory that brings a delightful sense of triumph and a peace that nothing but such a victory can give. The world is in great need of more of the saving grace of patience. We need to be more patient, not only with others, but with ourselves. There is a world of truth in what Bishop Hopkins has written about patience: "Patience is the ballast of the soul, that will keep it from rolling and tumbling in the greatest storms; and he that will venture out without this to make him sail even and steady will certainly make shipwreck and drown himself, first in the cares and sorrows of this world, and then in perdition."

The young have need of cultivating the grace of patience, because it is a tremendous help in achieving success in life. I do not know that Benjamin Franklin put it any too strongly when he said: "He that can have patience can have what he will." Certain it is that there are a great many things one

cannot have in this life without patience. Supposing you begin right now to be "Patient all day." I give you joy, your friends will give you joy, and your Heavenly Father will rejoice with you if you succeed, while your own joy will surely be the full compensation for anything it may cost you to achieve this great victory of "the patience that lasted all day."

Death of Russell Sage

RUSSELL SAGE, one of the great and unique characters of Wall Street finance, died on the 22nd of the past month at his home in Cedarhurst, L. I. Had Sage lived until the 4th of the present month he would have been ninety years old. In his death Wall Street loses one of its greatest financiers. In the last quarter of his ninety years of life he seldom missed a day at his office.

Russell Sage, the son of a New York State farmer, began his business career as a poor grocery clerk, and subsequently became owner of the grocery. He went into politics in Troy, and later became interested in railroads, knowledge of which later enabled him to secure large blocks of stock in the New York Central system. He served his country in Congress two terms.

In Wall Street he was looked upon as a financial economist, and it has been said of him that he could take hold of almost any financial enterprise and put it upon a solid basis. Mr. Sage was father of "Puts and Calls," "Straddles," "Spreads," and "All Privileges." He started this business in 1870, and said he did so to assist brokers of moderate means. In the June panic of 1884, with the crash of Ferdinand Ward, the suspension of the Metropolitan National Bank, and the tumbling of many brokerage houses, Mr. Sage lost \$8,000,000. Mr. Sage leaves about \$60,000,000, much less than his wealth had been estimated. This he leaves almost in its entirety to his wife. It is said of Mr. Sage, that once, during his lifetime, he gave \$50,000 for charity, and this only after his wife had urged him for more than a year. While "Uncle Russell," as he was familiarly known, has not made any charitable bequests in his will, yet, as his wife is known to be very charitably inclined, it is not to be unexpected but that a great deal of his accumulated fortune will find its way into charitable channels.

On December 4, 1891, Mr. Sage, while in his offices at 71 Broadway, escaped instant death as if by a miracle. A madman, Henry L. Norcross, a note broker in Boston, gained admittance on a pretext, and gave to Mr. Sage, a typewritten note which declared that if Mr. Sage did not immediately hand out \$1,250,000 he would fling a bag of explosives at Mr. Sage's feet. Norcross as Mr. Sage read the note gently swung a satchel. When Mr. Sage retreated and Norcross saw that his mission was to fail, he dropped the bag of explosives and was himself blown to pieces.

Mr. Sage escaped, but not unhurt. He groped his way out of the building to a drug-store, where his wounds were bandaged, and he was then driven home. That evening Supt. (then Inspector) Byrnes took the head of Norcross to Mr. Sage's bedroom. The basket was uncovered and Dr. Munn held up the head. Mr. Sage half rose in bed, looked at the face intently for a few seconds and then said:

"That is the person whom I saw with the satchel and the note." Mr. Sage was back in his office within a few days, but the explosion had burst the drum of one ear. Mr. Sage's secretary was killed and others were severely wounded, including W. R. Laidlaw, a clerk for John Bloodgood, who was with Mr. Sage on business when Norcross entered.

Laidlaw sued Mr. Sage, alleging that he was used as a shield by the latter. In the first trial he was non-suited. In the second he received a verdict for \$25,000. This was reversed, and Laidlaw continued to fight in the courts. In 1896 the Appellate Division of the Supreme Court gave him a verdict of \$40,000 and costs, but this was set aside in January, 1899, by the Court of Appeals and the case was dropped.

Mr. Sage had no children, and once told a friend that he greatly regretted that he had no sons to take up his affairs after he was "removed." Sage hated the word "death," and if he could speak of himself now, he would in all probability say, as suggests the New York "Sun," "I have been removed."

In business life he impressed one with the belief that he learned when he was twelve, that there is little if any sentiment in a man's business relations, and that a man, if he has an inspiration for wealth, must insist upon value received every time and must give it every time.



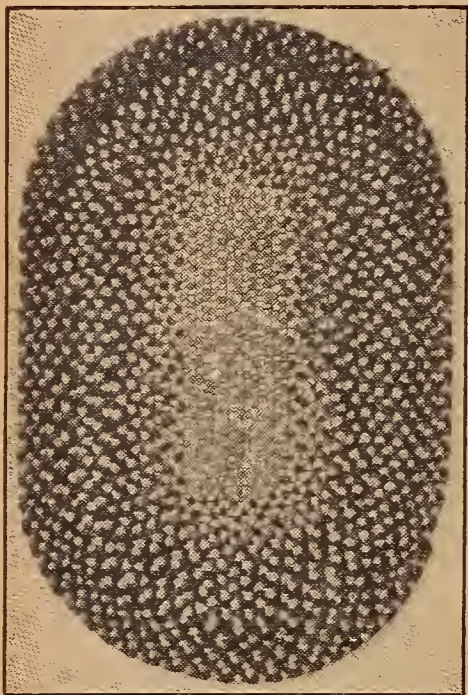
## Attractive Rugs Made from Scraps

WEAVING WITHOUT A LOOM

There are many ways of weaving by hand with looms of all grades and sizes, but the fact of being able to really weave without a loom is little known and practised. And yet this is strange, for one would suppose that most people interested in the subject could evolve some way of doing it for themselves, providing they understood the principles of weaving.

The requisites for weaving without a loom are a bread-board, some tacks, and a long, flat piece of wood for the needle. Old materials, washed and ironed or dyed the required shade, must be torn into strips about an inch wide, and can be used for both warp and weft.

The warps are the perpendicular lines, and these are crossed by the weft. We will now proceed to warp our improvised loom with white strips of material. White



A DAINTY RUG IN SHADES OF BLUE  
—THE EDGES ARE NEATLY  
TURNED IN

tape or cotton braid could be used, but that would of course necessitate an outlay in material, and I want to show first how you can use up odds and ends out of the rag-bag. All the white pieces that are a good color, and have not begun to turn yellow, can be laid on one side for warp and borders. Next we take the board and use it the widest way for the width. A straight line is now ruled across the board about an inch from the top. Next we decide how long we intend to make our rug. If the width is two feet, we will decide on the rug being five feet in length, as this is a good proportion. We must therefore have our strips about eleven feet long, twice the length of the rug and a little over.

It is best to have the materials ready, having previously sewn the strips neatly together and wound them into balls. Now take a strip and lay it smoothly on the board, beginning at the bottom, then hammer a tack in the white strip a few inches from the base. Carry the strip up to the top of the board, and hammer another tack in the material over the line already drawn on the board. Give the material a quick twist, and put another tack in the muslin half an inch further on the line. The strip is then carried smoothly down the board and another tack holds it in place. Now take a second strip, and repeat the process, continuing until the board is completely covered. Your loom is now warped and is ready for the needle. This must be longer than the width of the rug and is simply a flat piece of wood, about an inch wide, pointed at one end, and possessing three cuts for different size wefts at the other end.

A needle could be made from a yardstick, which could be pointed at one end and have a piece of stout buckram glued on at the end, in which holes could be cut for the material to go through if the wood should be too hard to cut. Now, after threading the needle with a contrasting color, we are all ready to start weaving.

Now, as we want the rug to be beautiful, we are not going to thread a faded pink, followed by a dingy brown, but we must have already decided on our color-scheme, which we have decided to have red and white. The warps all being white, the rest of the pieces must all have a dye bath. Some may be darker than others, but if black rags have been first picked out, the difference in shade will be almost imperceptible when woven. Having threaded the needle with the red material, we are now ready to begin weaving. This is very easy, for after all it is only darning under and over. The red strip must first be tacked a little to the left, and just



## The Housewife



below the upper left-hand tack, and then proceed to weave, first under and then over. Some find it easier to use a bodkin instead of the wooden needle already referred to, while others again push the strip under while raising the warp with the other hand. If the rags are old and soft they must be pushed firmly up toward the tacks, great pains being taken to make the work smooth and flat. When four inches of weaving is finished, use white for the border, which might be three inches wide when woven. Then thread your needle with red again, and weave three inches, make another white border, and weave another three inches of red. Another border could now be woven, as three at each end are more effective than two; an uneven number always having a better appearance. When the three borders are woven, the red is used until you reach the lower tacks on the board. The rug now needs moving up. Remove all the tacks, and push the rug up to the top of the board and tack each warp a little above the woven part. Now tack the warps at the bottom part of the board and proceed with the weaving. Measure where the borders come again, so as to have both ends of the rug exactly alike. Being able to move the rug enables you to make strips of any length. Some women make stair carpets in this way, omitting the borders. It is quite simple to add more material as you are working. If the rug is not heavy enough a double row of warp strips may be used, two being placed one above the other.

When the rug is woven the warps must be cut off about an inch longer than the rug, and woven under and stitched, to prevent its slipping out. The woof, at the start and finish, must also be fastened securely in the same way. Some people prefer a solid border all around the rug, and this is done by having four inches of red warp at the beginning and end of the rug, with the white warp between. The weaving with red weft is done until four inches are woven, repeating this when the rug is ready to be finished.

These rugs are, of course, much more attractive when made of new material, and if it is cut instead of torn makes a

making some useful articles for the home. An old lady of my acquaintance collects scraps of all kinds, and uses not only cottons, but flannels and materials of any kind of weight. Her rugs are the envy of all her friends, and she is generous in making presents to them and her relatives. I have seen many plaited rugs, but never any that compared to those done by this old lady. She makes oval, oblong and square rugs. Sometimes these are in tones of blues or reds, while others show varieties of color and materials.

The oval rug in our illustration is in two or three shades of delft blue, and the workmanship leaves nothing to be desired. First of all she tears her material into strips a yard, or possibly two yards, in length. If she is plaiting fine muslin and heavy material like denim, she would have the muslin about two inches wide, while the denim would be only one inch in width. In this way she can use all kinds of material in the same rug. Her manner of working is very simple. She pins the rug to her dress on her lap and begins to plait, sewing the plaits together as she goes along. She does not have the material too long to plait conveniently, as it is no trouble to her to join on a piece as she goes along. If she has strips a yard long, one of them must not be more than a fourth of a yard long. In this way the plaiting never becomes entangled. This is the reason that most women become discouraged by rug-plaiting; as they are apt to get it tangled up by not knowing this fundamental principle.

Many people plait quickly and roughly, leaving raw uneven edges, but my old lady is never guilty of this kind of work. Each piece of material has its edge neatly folded in, and the strip is again folded in half, so that the plaiting is solid and heavy, making a good substantial rug.

As she never buys any material for the rugs it is hard to average the cost, and the work is a delightful pastime for her. Most plaiters of rugs will tell you that it is only possible to make them in round or oval shape, but this old lady has invented a mode of mitering the rugs, which adds to their usefulness, as she frequently makes a rug large enough to cover an entire bedroom floor. When she cannot



THE ROUGH-AND-READY KIND OF PLAITING, NOT TURNED IN AT THE EDGES

neater and more workmanlike rug. Cotton flannel or even canton flannel can be used. Three and one half yards of new material would make a rug twenty-two inches by six feet, which is a good size for a bathroom.

This style of weaving need not be confined to the making of rugs; it is used for porch or summer pillows, or for making material for chair-seats; in fact, there is no end to what can be done by a thrifty woman with an ingenious mind.

## PLAITING RUGS

Very pretty and serviceable rugs can be made by plaiting. This method is especially recommended for old women who do not want to strain their eyes with fine needlework, and yet like to ring the changes from knitting and crocheting to

get the desired colors she dyes them, and after using what she needs, keeps the balance for future rugs. Her square rugs usually have a piece of black felt pinned at the edge to enable them to hug the floor, and to prevent the edges of the rugs from getting soiled.

MABEL TUKE PRIESTMAN.

## Fruit Ice-Creams

**APRICOT ICE-CREAM**—Press the fruit through a sieve. To half a pint of apricot add the juice of one lemon, four ounces of pulverized sugar and one pint of sweet cream. Freeze.

**BANANA ICE-CREAM**—Mash bananas, and sprinkle thickly with white sugar. After standing half an hour add one pint of rich cream for each pint of fruit; sweeten to taste and freeze.

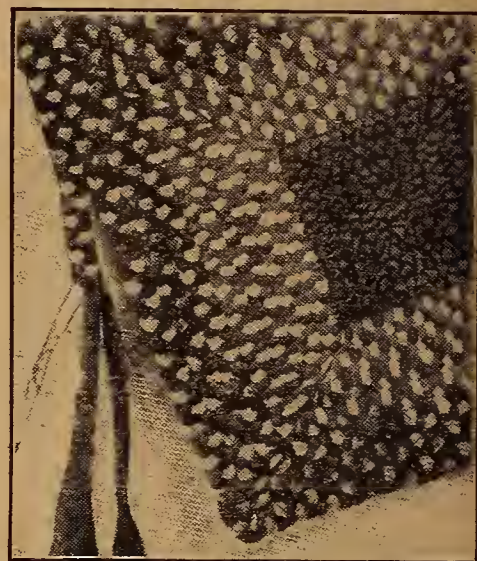
**PEACH ICE-CREAM**—One dozen choice ripe peaches. Peel and stone. Crush with six ounces of white sugar. Place over the fire one quart of nice cream, eight ounces of white sugar and two beaten eggs. As soon as the boiling point is reached, remove and strain. Freeze. When nearly frozen stir in the peaches.

**PINEAPPLE ICE-CREAM**—Slice the pineapple and cover with sugar. Let them stand over night, then chop fine. To each quart of fruit allow one pint each of milk and cream, half an ounce of gelatine, dissolved; mix, add the pineapple, sweeten to taste and freeze.

**BAKED APPLE ICE-CREAM**—Rub the baked apple through a sieve, and to each pint of pulp allow one pint of cream. Sweeten to taste, and when about half frozen add half a pint of whipped cream.

**ORANGE ICE-CREAM**—Boil one pint of cream and dissolve in it three fourths of a pound of sugar. When cool add the grated rind of two oranges and the juice of six; stir in one pint of cold cream and freeze.

**LEMON ICE-CREAM**—Squeeze the juice



NOTICE HOW STRONG AND FIRM EACH PLAIT IS, AND EACH STRIP OF MATERIAL IS FOLDED SO THAT NO RAW EDGES ARE VISIBLE

from one dozen lemons; sweeten well, and stir into it very slowly three quarts of cream. Freeze.

**COCOANUT ICE-CREAM**—One pound of grated cocoonut, one pound of sugar, one pint of cream. Stir the cocoonut gradually into the cream, heat well to extract the flavor of the nut, pour into a bowl and stir in the sugar; when cool, stir in three pints of fresh cream and freeze.

**TUTTI-FRUTTI ICE-CREAM**—Sweeten nice rich cream, and when half frozen add equal parts of half a dozen different kinds of crystalized fruits and one variety of nuts; or preserved peaches, plums, cherries, apricots, with other homemade preserves, all cut in small pieces and drained of their syrup, in the proportion of one pound of fruit to two quarts of cream. If too sweet add a little lemon juice and finish freezing. GILBERT ALLEN.

## Filletted Herrings

**SPLIT** the herrings open down the back and remove as many of the bones as possible; trim each half, then roll up with half the roe inside each roll. Stand them in a buttered pie-dish, pour in vinegar and stock enough to cover the rolls about half way up. Put in a sliced onion, one or two bay leaves, cloves and peppercorns and a little salt. Bake in a hot oven for half an hour, basting the herrings occasionally with the liquor. Serve cold, with beet-root salad.

## Half-Hour Dumplings

**MINCE** finely one half pound of suet, mix with it the same proportion of grated bread, a tablespoonful of flour, one fourth of a pound of currants, a tablespoonful of sugar, the grated peel of half a lemon, one fourth of a nutmeg grated, and three well-beaten eggs. Roll the mixture into round balls, tie them in bits of linen and boil them for half an hour. Serve with melted butter and sugar poured over them.

## Savory Jelly

**SOAK** two ounces of gelatine for some hours in a little water. Then melt it in a quart of boiling water and pour it into a saucepan. Add two dessert-spoonfuls of good extract of meat, half a pint of rich stock, flavoring, pepper, salt and the white of one egg. Bring all the ingredients slowly to boiling point, stirring all the while. Leave the mixture to cool for a few minutes and then strain into a mold. This should be stood in cold water in the larder till next day, when it will have set and can be turned out ready for use.





Sunday Reading

Advice

"Good habits are one's source of wealth," While bad ones undermine the health. The one extends the happy years; The other brings remorse and tears.

Now, boys and girls of tender age, Commencing records on life's page, Just keep the pages pure and clean, That blenishes may not be seen.

ALBERT E. VASSAR.

Good Luck

WE HEAR many people talking about "good luck." But things are not at loose ends. Behave yourself well, and matters will come out about right; sin against God, and things will come out all wrong. He who cheats and lies and swears will have bad luck. He who faithfully serves God will have good luck. When we see a boy coming in from a street fight, with bruised eye, and soiled coat, and rough behavior, we say, "That boy has had bad luck." When we see a girl with a pouting lip, cross and snarlish, and hard to please, saying sharp things to her mother, and making herself, in the house and at school, very disagreeable, we are apt to say, "That girl has had very bad luck."

But it would be better to talk more of the kind Providence that arranges our lot and less of chance. There is no such thing as luck; our blessings are more than our losses. People ought to hunt more for marigolds and buttercups and less for burs and thistles. We could not tell you how many times we have met with what people call good luck. If we were about to start on a journey, and wanted fair weather, though we heard it storm in the night, we have almost always found that the sun shone brightly in the morning. If we had a bad cold, and feared that we would not be able to preach next Sabbath, by the time the day came we were hale and healthy. If someone stole our umbrella, we generally found that an unknown person had lost his umbrella in our entry. We left our cane in the cars, but a friend presented us with another. Our carriage broke down, but we got the benefit of exercise in walking. We missed the train, but by that means escaped a terrible accident. A steambot on the Hudson River took fire, but we had chosen that same night to go on the other one that came through undamaged. We never knew an unkind thing to be said about us but it in some way turned out to our advantage. We had an unexpected call for twenty dollars, and from the gutter on Chestnut Street, Philadelphia, we picked up a pocketbook containing twenty dollars. Almost everything that we expected to turn out wrong has turned out right. We have been fortunate in selecting our grocer, our tailor, our doctor and our friends. We were born in a very good place, at just the right time, and had the best of parents. We would not trade off our circumstances for anybody else's circumstances.

We have had what people call good luck in the morning, good luck at noon, and good luck in the evening. We have trod on many sharp thorns, and drank from a bitter cup, and looked into very dark skies, but still we can say, "Goodness and mercy have followed us all the days of our life."

Henceforth, let us give more time to thinking of our joys, and less of our vexations. That is what we mean by hunting more for marigolds and buttercups, and less for burs and thistles.—T. DeWitt Talmage.

Push

SUCCESS or failure is often a mere question of self-confidence and self-assertion. The expressive Americanism "push" describes the quality better than any other term. It is a nice point for decision in the domestic forum to determine whether the time-honored proverb, "A child should be seen and not heard" in the presence of his elders, is quite sound. Excessive shyness, which is supposed to be the trait of a particularly good and tractable boy, is one of the worst equipments for the ascent toward any kind of greatness. This quality is feminine, and will retard the progress of a man. The street gamin, unlovely as he often is, has some disciplinary compensations in his rough life which frequently develop sterling manhood. He must fight his way. The discipline of conflict produces a hardy nature, not easily disconcerted or discomfited by trifles.

It is, of course, dangerous to leave a

youngster entirely to his own devices, but excessive coddling in the home nest may prevent him from making a lofty and sustained flight when he is thrown out of the nest to try his own pinions. A little dash of adventure does not hurt the boy. How many of us have learned to swim by absconding secretly to the pond, to the infinite trepidation of solicitous parents when the momentous secret leaked out! A heterodox philosopher observes that, while the conventional precepts inculcate ideals of caution with respect to the rising generation, "those characters in history who have most notoriously flown in the face of such precepts are spoken of in hyperbolic terms of praise and honored with public monuments in the streets." There was Columbus, whom this philosopher characterizes as "a most imprudent navigator," whose life "is not the kind of thing one would like to put into the hands of young people. Rather one would do one's utmost to keep it from their knowledge, as a red flag of adventure and disintegrating influence in life."

The youth should be encouraged in manly forwardness, a different thing from mere impudence. In any group of youngsters there is always one who forges ahead and leads by a natural self-assertion, and is going to stand at the head, or somewhere near it, in trade, statesmanship, preaching or commanding of any sort, provided his morals are all right. If not, he may become the chief of pirates or leader of the political "gang." The essential thing in youth and manhood is purified self-confidence. The good man with this quality will stand before kings. This is a world of contention. The weak and the shy have little chance for advancement in the fierce rivalry of mental, moral and physical strength. The discreet parent perceives the difference between the discipline of absolute suppression and the excessive latitude permitted some children in having their own way. "Be bold, but not too bold," is a safe proverb for age and youth, but self-assertion, the pushing spirit which laughs at rebuffs, wins in every field of endeavor.—Philadelphia Ledger.

But One Question

TALK about questions of the day, there is but one question, and that is the gospel; it can, and will, correct everything needing correction. All men at the head of great movements are Christian men. During the many years I was in the Cabinet, I was brought into association with sixty master minds, and all but five of them were professing Christians. My only hope for the world is in bringing the human mind into contact with divine revelation.—Gladstone.

In Contrast

WHEN the Jew was not wholly certain whether the Samaritan could be saved, Jesus told the story of one who rescued the wounded traveler upon the Jericho road, the sufferer whom priest and Levite had left to his fate. Now that an American author has written a book to prove that negroes have no souls, we suggest future editions contain as a preface the story which comes to us from the smoking ruins of San Francisco. It seems that a sick and weary white fugitive found his strength utterly exhausted before he reached the ferry beyond which safety lay. He appealed to a fellow-Caucasian, and was refused aid because he had not the \$25 demanded for cartage of his trifling effects. But it came to pass that a black man, himself flying from the scene, was next appealed to, and he took upon himself the "white man's burden" and transported him to his journey's end, refusing all compensation. Which of the two, think you, had a "soul" in him? And which in the day of judgment will shine forth, despite the color of his skin, white as the sun?—Interior.

Words

Words are things of little cost, Quickly spoken, quickly lost. We forget them, but they stand Witnesses at God's right hand, And a testimony bear For us or against us there.

Grant us, Lord, from day to day, Strength to watch and grace to pray. May our lips, from sin set free, Love to speak and sing of Thee, Till in heaven we learn to raise Hymns of everlasting praise.

—British Weekly.

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DIGGING WORMS



PRETTY NEAR TIME FOR A BITE

*a. Burton*



ALL ABOARD FOR THE FISHING-BANKS



TRUANTS



At the Circus, or Earning His Passage

Tommie—"Say, Pa, what's that?"  
 Pa—"Oh, that's a hyena."  
 Tommie—"What's a hyena?"  
 Pa—"That's one."  
 Tommie—"Is it a laughin' hyena?"  
 Pa—"Yes, I reckon."  
 Tommie—"Why don't it laugh?"  
 Pa—"Don't feel like it, I reckon."  
 Tommie—"What's this?"  
 Pa—"That's a rhinoceros."  
 Tommie—"What's the matter with its nose?"  
 Pa—"Nothing. That's the way it grows."  
 Tommie—"Do all of 'em have that thing stickin' up?"  
 Pa—"Yes."  
 Tommie—"What's it for?"  
 Pa—"Oh for fighting and rooting in the ground."  
 Tommie—"Can he put up a good scrap?"  
 Pa—"Yes, I reckon."  
 Tommie—"What's this big, fat thing?"  
 Pa—"That's a hippopotamus."  
 Tommie—"What's he good for?"  
 Pa—"Nothing, just to have in shows."  
 Tommie—"Pa, why do they call them all such big names?"  
 Pa—"Just because."  
 Tommie—"But why?"  
 Pa—"Just because, I tell you. Come on."  
 Tommie—"Look at that thing with a long neck."  
 Pa—"Yes, that's a giraffe."  
 Tommie—"What made its neck stretch so?"  
 Pa—"It just grew that way."  
 Tommie—"What for?"  
 Pa—"So he could eat the leaves off the trees."  
 Tommie—"What did he want to do that for? Say, Pa, what makes all them spots on him?"  
 Pa—"That's his natural color."  
 Tommie—"Who made it natural that way?"  
 Pa—"God."  
 Tommie—"Did God make all the animals the way they are?"  
 Pa—"Yes."  
 Tommie—"Gee! He must be busy! Oh, here are the monkeys! Let's stop and look at them."  
 Pa—"No, come on. We'll see them when we come out. It's time for the show to begin."  
 Tommie—"But I want to see the monkeys."  
 Pa—"When we come out, I tell you."  
 Tommie—"But I want to see them now."  
 Pa—"They'll be there when we come out."  
 Tommie—"No, they won't (crying)."  
 Pa—"Here, shut up that crying!"  
 Tommie—"But I want to see the monkeys, right now, too."  
 Pa—"Hush it! Hush it, I say! Do you hear me? Catch me taking you anywhere again! Now hush, or we'll go right straight home. Come on. There the show begins. Hurry up, we'll miss part of it. There, see all the men and women on horseback."  
 Tommie—"What's that man with the funny night-drawers on?"  
 Pa—"That's the clown. Isn't he funny?"  
 Tommie—"What's he got on his face?"  
 Pa—"That's flour."  
 Tommie—"What's he got it there for?"  
 Pa—"To make him look funny."  
 Tommie—"Pa, I want some peanuts."  
 Pa—"Here come the trapezists."  
 Tommie—"What's trapezists?"  
 Pa—"People that do things up in the air on those trapezes."  
 Tommie—"What for?"  
 Pa—"Confound it! Don't ask so many questions. Look and see for yourself."  
 Tommie—"I want some popcorn."  
 Pa—"Look at that woman, now. See her fly through the air."  
 Tommie—"Is that a woman?"  
 Pa—"Yes, that's a woman."  
 Tommie—"Where's her clothes?"  
 Pa—"I don't know."  
 Tommie—"Ain't she got any?"  
 Pa—"No."  
 Tommie—"Did she lose 'em?"  
 Pa—"Yes. Shut up."  
 Tommie—"In San Francisco?"  
 Pa—"Yes. Keep still, can't you?"  
 Tommie—"Why don't somebody give her some?"  
 Pa—"Yes. Say, by George she's a peach!"  
 Tommie—"Pa, I want some lemonade. Pa—Pa—Pa—Pa—Pa! Doggone it, Pa can't you hear nothin'? I want some lemonade."  
 Pa—"Will you shut up if I huy you some?"  
 Tommie—"Yes."  
 Pa—"And not bother me asking any more questions?"  
 Tommie—"Yes."  
 Pa—"All right, then; see that you do." (Two minutes elapse.)  
 Tommie—"Pa, what's she doin' that for?"  
 Pa—"Just to—. What did you promise me?"  
 Tommie—"But I want to know—"  
 Pa—"You're the worst kid I ever saw, asking questions. Catch me bringin you to another circus!"  
 Tommie—"When is the next one?"—Hugh Herdman in Pacific Monthly.



Wit and Humor



Vegetarian Dog

The dog's fate is inextricably bound up with man's, and he at last is likely to become a victim of man's self-consciousness regarding his stomach. News comes from Chicago of a dog whose master is a vegetarian, and the man decided after much pondering that the civilized dog should abstain from meat. After a few weeks of bran and predigested foods the dog began to hang his head and show signs of age and decrepitude. The salvation of this particular dog lay in the sympathy of a neighbor of his master who had lived through a vegetarian, nuts and fruits, roots and herbs, no tobacco period,



Teacher—"I didn't quite catch your definition of fountain."  
 Small Boy—"I said 'a fountain is a rainstorm squirted up through a hole.'"

and whose heart went out to the vegetarian dog. Of dark nights he secretly conveyed chops and bones to the vegetarian dog, who thrives to his master's great delight and to the confusion of skeptics.—Kansas City Journal.

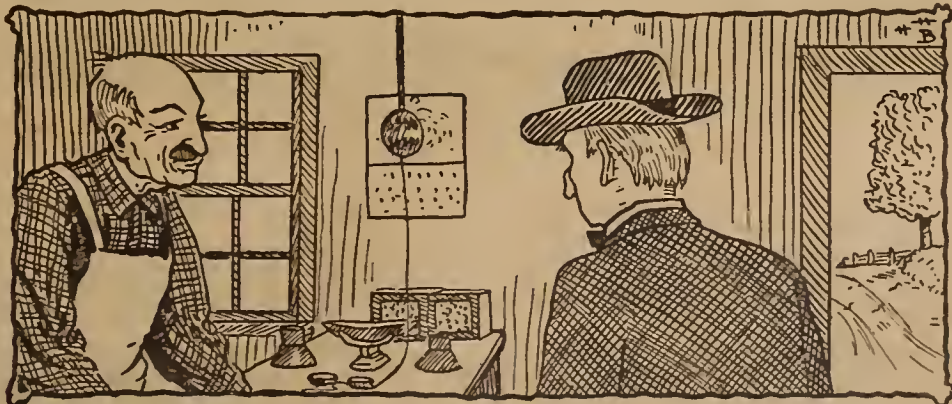
"Are you a burglar, my man?" asked the householder. "No," responded the man with the dark-lantern, "I am an agent of the Society to Limit the Size of Great Fortunes."—New York Herald.

An Echo Alarm-Clock

President Murphy, of the Chicago National League Club, told at a baseball dinner a remarkable echo story, according to an exchange.

"There was a man," he began, "who had a country-house in the Catskills. He was showing a visitor over his grounds one day and, coming to a hilly place, he said: 'There's a remarkable echo here. If you stand under that rock and shout the echo answers four distinct times, with an interval of several minutes between each answer.'"

"But the visitor was not at all impressed. He said, with a loud laugh: 'You ought to hear the echo at my place in Sunapee. Before getting into bed



Customer (Not in a joyful mood)—"What are eggs to-day?"  
 Storekeeper (Triumphantly)—"Eggs are eggs to-day."  
 Customer—"Well, I am glad to hear that—those I got here yesterday were chickens."

at night I stick my head out of the window and shout, 'Time to get up, William!' and the echo wakes me at seven o'clock sharp the next morning."—Cincinnati Commercial Tribune.

Permission Granted

The following incident is related of Nat Goodwin, the actor. Not long ago Goodwin was standing on the corner of Broadway and Thirty-fourth street, where three car-lines converge, when a seedy-looking individual, apparently from the country, approached him questioningly.

"I want to go to the Brooklyn bridge," he said, looking in perplexity at the cars rushing in six different directions.

"Very well," said Goodwin, severely; "you can go this time, but never ask me again."—Harper's Weekly.

All Right for the Pig

Father Flynn—"Why don't you have your pig-sty farther from your house, Grogan?"

Grogan—"Phat for, yer rivrence?"

Father Flynn—"Because it's unhealthy."

Grogan—"Divil a bit yer rivrence! The pig has niver had a sick day since he wuz born!"

The Wife's Reproach

Admiral Capps, in an address to a temperance society, told how drink had once caused the downfall of a brave soldier. In the course of the sad story he said: "Sometimes, after a debauch, the man

would be repentant, humble. He would promise his wife to do better. But, alas! the years taught her the barrenness of all such promises.

"And one night, when he was getting to be an old man, a prematurely old man, thin limbed, stoop shouldered, with red-rimmed eyes, he said to his wife, sadly:

"You're a clever woman, Jenny; a courageous, active, good woman. You should have married a better man than I am, dear."

"She looked at him, and, thinking of what he once had been, answered in a quiet voice:

"I did, James."—New York Tribune.

"Then you have no sympathy for the deserving poor?" asked the person working for charity.

"Me?" replied the rich and great man. "Why, sir, I have nothing but sympathy for them."—Milwaukee Sentinel

How She Timed the Eggs

Bishop Paret, of Baltimore, some time ago was the guest of an Episcopal family in West Virginia. Learning that the bishop liked hard-boiled eggs for breakfast, his hostess went to the kitchen to

Casey's Revenge

BY JAMES WILSON

Being a Reply to the Famous Baseball Classic "Casey at the Bat."

There were saddened hearts in Mudville for a week or even more; There were muttered oaths and curses—every fan in town was sore. "Just think," said one, "how soft it looked with Casey at the bat! And then to think he'd go and spring a bush league trick like that."

All his past fame was forgotten; he was now a hopeless "shine." They called him "Strike-out Casey" from the mayor down the line, And as he came to bat each day his bosom heaved a sigh, While a look of hopeless fury shone in mighty Casey's eye.

The lane is long, someone has said, that never turns again, And Fate, though fickle, often gives another chance to men, And Casey smiled—his rugged face no longer wore a frown; The pitcher who had started all the trouble came to town.

All Mudville had assembled; ten thousand fans had come To see the twirler who had put big Casey on the bum; And when he stepped into the box the multitude went wild. He doffed his cap in proud disdain—but Casey only smiled.

"Play ball!" the umpire's voice rang out, and then the game began; But in that throng of thousands there was not a single fan Who thought Mudville had a chance; and with the setting sun There hopes sank low—the rival team was leading "four to one."

The last half of the ninth came round, with no change in the score; But when the first man up hit safe the crowd began to roar. The din increased, the echo of ten thousand shouts was heard When the pitcher hit the second and gave "four balls" to the third.

Three men on base—nobody out—three runs to tie the game! A triple meant the highest niche in Mudville's hall of fame; But here the rally ended and the gloom was deep as night When the fourth one "fouled to catcher" and the fifth "flew out to right."

A dismal groan in chorus came—a scowl was on each face— When Casey walked up, bat in hand, and slowly took his place; His bloodshot eyes in fury gleamed; his teeth were clinched in hate; He gave his cap a vicious hook and pounded on the plate.

But fame is fleeting as the wind, and glory fades away; There were no wild and woolly cheers, no glad acclaim this day. They hissed and groaned and hooted as they clamored, "strike him out!" But Casey gave no outward sign that he had heard this shout.

The pitcher smiled and cut one loose; across the plate it spread; Another hiss, another groan—"Strike one!" the umpire said. Zip! Like a shot, the second curve broke just below his knee—"Strike two!" the umpire roared aloud; but Casey made no plea.

No roasting for the umpire now—his was an easy lot. But here the pitcher whirled again—was that a rifle shot? A whack! a crack! and out through space the leather pellet flew— A blot against the distant sky, a speck against the blue.

Above the fence in center field, in rapid whirling flight The sphere sailed on; the blot grew dim and then was lost to sight. Ten thousand hats were thrown in air, ten thousand threw a fit; But no one ever found the hall that mighty Casey hit!

Oh, somewhere in this favored land dark clouds may hide the sun, And somewhere bands no longer play and children have no fun; And somewhere over lighted lives there hangs a heavy pall; But Mudville hearts are happy now—for Casey hit the ball!

His Chief Recommendation

The Rev. Dr. Madison C. Peters, in an attack on the marriage customs of the twentieth century, related an anecdote.

"A beautiful young girl and her mother," he said, "were discussing the eternal marriage question.

"Well, there's Charles Adams," murmured the mother, thoughtfully, after a long pause.

"Charles Adams!" sneered the girl. "He is old, he is ugly, he is mean, he is a coward, Charles Adams! Why, he has nothing, nothing in the world to recommend him except his wealth."

"You forget his heart disease" said the mother, softly.—New York Tribune.

A Memphis (Missouri) man has discovered a new way to get rid of mosquitoes. He says to rub alum on your face and hands. When the mosquito takes a bite it puckers his buzzer so it can't sting. It sits down in a damp place, tries to dig the pucker loose, catches its death of cold and dies of pneumonia.—Kansas City Star.

Every time you write to an advertiser in FARM AND FIRESIDE, you are doing your favorite paper a favor.



### The Island of Catalina

WITH its wonderful harbor, its queer canvas city, its picturesque hills and its fascinating climate, the island of Catalina, off the southern coast of California, is an exceedingly interesting place to visit. It is a great all-the-year-round tourist resort. The sloping beach is a remarkably fine stretch of sand, and the water in the bay is so clear that it is possible to see the bottom distinctly and to distinguish fish and shells far down in the depths.

There are a number of boats in use on the bay which have glass bottoms, so that the occupants may gaze down into the water as they glide along. Expert divers are at hand and when a visitor signifies a



## Of Curious Interest

hundred feet away. If timber is cut on a bank where a down grade can be had all the way to the streams, much larger pieces will be moved.

Contrary to the general opinion the beaver does not always build a house for

ings within the last three months, at least so declare art dealers who have followed Mr. Morgan's purchases. Recently Mr. Morgan paid \$200,000 for a single portrait. A correspondent has asked one of the most expert judges of art, and one who knows Mr. Morgan well, whether the New Yorker really understands and appreciates the works of art he buys, and his answer was:

"Mr. Morgan has neither taste nor knowledge in art. His acquisitions are made in exactly the same spirit that incited his countryman, Barnum, to search for freaks.

"He learns what is the best price ever paid for a work by the same painter, and, knowing this, orders his agent to offer a much larger price for the work he wishes to acquire."

### The Signs of Clouds

Do you believe in signs? Those of the clouds are especially interesting. According to an article in the "Scrap Book," soft-looking or delicate clouds foretell fine weather, with moderate or light breezes; hard-edged, oily looking clouds, wind.

A dark, gloomy blue sky is windy, but a bright blue sky indicates fine weather.

Small, inky looking clouds foretell rain. Light scud clouds, driving across heavy masses, show wind and rain; but if alone may indicate wind only.

High upper clouds crossing the sun, moon or stars in a direction different from that of the lower clouds, or the wind then felt below, foretell a change of wind toward their direction.

After fine, clear weather, the first signs in the sky of a coming change are usually light streaks, curls, wisps or mottled patches of white, distant clouds, which increase, and are followed by a murky vapor that grows into cloudiness. This appearance, more or less oily or watery, as wind or rain will prevail, is said to be an infallible sign.

Usually, the higher and more distant such clouds seem to be, the more gradual but general the coming change of weather will prove.

Light, delicate, quiet tints or colors, with soft, undefined forms of clouds, indicate and accompany fine weather; but unusual or gaudy hues, with hard, definitely outlined clouds, foretell rain and probably strong wind.

Misty clouds forming or hanging on heights show wind and rain coming, if they remain, increase, or descend. If they rise or disperse, the weather will improve or become fine.

### Giving Him a Chance

ONE of the unfortunate facts of life is that the world in general regards business principles as something entirely different from the code of morals which govern the other relations of human beings—a code into which love and charity freely enter. It took a ragged little newspaper boy to prove, the other day, that certain old-fashioned Biblical precepts are not out of place in the practical, working world. A newspaper tells the very striking and interesting story:

A gentleman, hurrying down town, stopped for a paper.

"Can't let you have one," said the boy.

"Why not? I heard you crying them."

"Yes, but that was down the other block where I hollered."

"What does that matter? Come, I'm in a hurry. No fooling."

"Couldn't sell you a paper on this block, mister, 'cause it belongs to Limpy. He's up to the furthest end just now. You'll meet him."

"Who is Limpy? And why does he have this block?"

"'Cause us other kids said we'd let him have it. You see, it's a good run 'count of the offices all along, and the poor chap is that lame he can't git round lively like the rest of us, so we agreed the first one caught selling on his beat should be thrashed. See?"

"Yes, I see. You have a sort of brotherhood among yourselves?"

"Well, we're going to look out for a little chap what's lame, anyhow. There comes Limpy now."

The gentleman bought two papers of him and went on his way down town, wondering how many men in business would refuse to sell their wares in order to give a weak, halting brother a chance in the field.—Youth's Companion.

### The Guarantee Counts

You can trust some storekeepers. You would feel perfectly safe in trying anything they recommend, because you know that if it isn't as they say they will make good the loss. Please consider FARM AND FIRESIDE a big storekeeper, and the things advertised in its columns the goods the storekeeper recommends. You cannot lose anything by patronizing FARM AND FIRESIDE advertisers and you will undoubtedly gain much, because the things advertised are just the things you need, at prices probably lower than you could find elsewhere.



TOWN OF AVALON, CATALINA

desire for a particularly fine shell which he sees on the harbor bottom, a diver will quickly descend and bring it to the surface. Every movement of the diver can be plainly seen as he swims under water.

The principal place on the island is the town of Avalon, of which the famous canvas city is a part. Many visitors find temporary shelter here, and others engage the tents for a long period. The tents line each side of a handsome street overhung by the branches of two long parallel rows of eucalyptus trees. The tents are commodious and comfortable—really canvas bungalows. The whole makes up a very beautiful avenue.

The entire island is attractive and interesting. It is twenty miles long and two and one half miles wide and is visited by thousands of travelers annually.

### Owl Thief Caught

THE "Herald" of Titusville, Pa., says that Joseph Boyer of Neilltown, mystified by the frequent disappearance of his chickens and ducks, set two steel mink traps by the body of a duck killed the other night.

In the morning he found a large horned owl, a monster even for his class, with one leg in each trap. When Boyer approached with a club to have his revenge the owl soared to the top of a large tree, taking duck and traps with him. He appeared to have about all he could do to hold the hardware attached to him.

Mr. Boyer chopped the tree down and this time the owl was captured alive and imprisoned in a cage.

### Blue Jay a Mouser

THE Corksdale correspondent of "Forest and Stream" tells of a new role assumed by the jay-bird. A few days ago a party of friends at a near-by residence were sitting on the front porch, when a jay-bird alighted on the yard pickets a few feet distant. The bird presently flew to the ground and seized a live mouse, which after a struggle was subdued, and the bird, holding the mouse by the neck with his bill, flew away with it.

### Great Feats of the Beaver

IT is truly wonderful what feats the little beaver is capable of performing. Their work is generally performed on moonlight nights and scarcely ever in the daytime, although they may sometimes be seen making repairs on a dam when immediate attention is necessary. A writer in "Outdoor Life" says he has frequently seen cuttings of cottonwood large enough for fence-posts that had been moved over level ground and through underbrush to water several



CANVAS CITY, CATALINA

himself, being content very often with a burrow in the bank of the stream. As is the case with the houses, the entrance to a burrow is under the water, though sometimes there is an opening from the surface through which brush and sticks are carried for their food supply.

When a colony of beavers is harrassed by its enemies, or when internal dissensions arise, a part or the whole of the colony will establish a new home some distance away. They lose no time in choosing a weak portion of the river, where the banks are well flooded, and fall at once to work.

In the days of our great-grandfathers the beaver was a resident of many streams and small lakes all the way from Maine to Oregon. He is now numbered among our rare animals, and a few years ago seemed doomed to total extinction.

Recently some of the Northwestern states have given him a certain amount of protection, and in favorable localities of this region he is now increasing quite rapidly in numbers.

### Art His Hobby

THE person who harbors art as a hobby must needs have great funds to satisfy one's desires. J. Pierpont Morgan has paid more than \$3,000,000 for paint-



Photo by W. S. Rensiner

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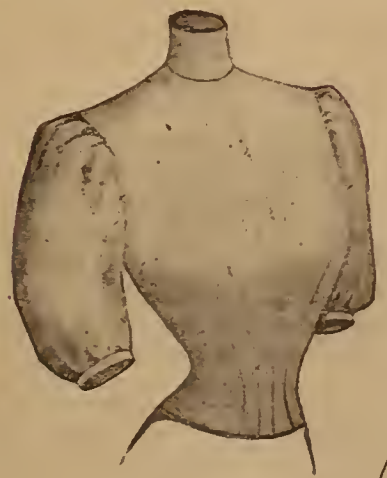
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No. 750—Dress Sleeves  
Sizes Small, Medium and Large. 10 cents.



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**FREE** We will give any THREE of these patterns for sending TWO yearly subscriptions to FARM AND FIRESIDE at the regular price of 25 cents each. When ordering "write your name and address distinctly."

We will send FARM AND FIRESIDE One Year, new or renewal, and any ONE pattern for **Only 30 Cents**



To Our Readers

SO MANY of you have asked us now we can give you so much for twenty-five cents that we have decided to tell you why. Of course it would be impossible for us to send this great big paper—the Giant of the Farm Press—twenty-four times a year for twenty-five cents, if we did not have some other source of revenue from it. Advertising supplies that source. If it were not for the patronage of the honest merchants who solicit your trade through our columns, we should have to cut down the size of our paper to almost nothing—in fact, we could not afford to publish at all.

And how do we get the advertising? Simply because you answer advertisements. If you never wrote to an advertiser and told him that you saw his name in FARM AND FIRESIDE, that advertiser would drop right out of the paper. And, of course, if many did that, you would be the loser, because we should have less money to put into the paper, and should have to make a poorer one, or raise the price to you. So you see what a great responsibility rests upon you as a friend of FARM AND FIRESIDE.

People used to be suspicious of advertised goods—now they are suspicious of goods not advertised.

Business Methods in Farming

In the "American Monthly Review of Reviews" for January of this year there was a striking article on "Farming as a Business Enterprise" which said that "business system and method have not progressed as rapidly in agriculture as in the other great industries of the nation. . . . The typical farmer of today is not as good a business man as his neighbor who is conducting a shop or a small factory with an equal capital." Two months before this article appeared, the executive committee of the Farmers' National Congress had determined that one of the subjects to be discussed at its twenty-sixth annual session at Rock Island, Illinois, October 9-16 next, should be "Business Methods in Farming," and the congress seems to be fortunate indeed in the men secured to present addresses on this subject—Hon. David Rankin, of Tarkio, Missouri, and Mr. L. Whitney Watkins, of Manchester, Michigan.

Mr. Rankin is one of the half dozen most extensive and successful farmers in the United States. He started without capital and is now a millionaire, nearly all of which he has made out of farming. He has 23,504 acres of fertile land in actual and high cultivation. He puts 16,000 acres in corn, on the average, and feeds and ships each year an average of 9,000 cattle and as many hogs. He has never before consented to prepare a paper or address for any meeting.

Mr. L. Whitney Watkins is only thirty-three years old, but he is one of the notably successful farmers of the United States. He is a graduate of Michigan Agricultural College, has served six years on the Michigan State Board of Agriculture; is President of the Michigan State Association of Farmers' Clubs, and President of the Michigan Association of Breeders of Improved Live Stock. The Watkins farm contains 2,300 acres in the highest state of cultivation. The land was taken up by Mr. Watkins' grandfather from the government in 1834, and not an acre has passed from the ownership of the Watkins family or been encumbered by debt, and a Watkins has never retired from farming.

All subjects presented at the meeting at Rock Island will be open for discussion. The Farmers' National Congress is composed of farmers, editors and proprietors of farm papers, and instructors in agricultural colleges appointed as delegates by the governors of the various states. Anyone desiring to attend should address the secretary, Geo. M. Whitaker, P. O. Box 1332, Boston, Mass., or the president, John M. Stahl, Quincy, Ill.

Catalogues Received

C. Betscher, Canal Dover, Ohio. Special list of peonies. Fairbanks, Morse & Co., Chicago, Ill. Illustrated catalogue of gasoline, kerosene and alcohol engines. Flint & Walling Mfg. Co., Kendallville, Ind. Illustrated catalogue of water-tanks and steel substructures. The Hydraulic Press Mfg. Co., Mt. Gilead, Ohio. Catalogue No. 21—"The Manufacture of Cider Vinegar, Appie Wine and Cider Champagne." Price, \$1. The Chicago Commercial Association, Chicago, Ill. Pamphlet—"From the Great Lakes to the Gulf of Mexico," the report of the Deep-Waterway Committee of the Chicago Commercial Association.

# Rex Flintkote ROOFING

DAIRY BARN MAJOR DAVIS GRAND ISLE, VERMONT. COVERED WITH REX FLINTKOTE ROOFING.

"Thoroughly Adapted for any Farm Building."

The practical farmer here quoted states from experience this truth about Rex Flintkote Roofing. Your roofing problems now were his a little while ago. He experimented just as you're experimenting—wasting money on roofs that invite fire, that expose products to the weather, that damage the buildings themselves and that require frequent replacing. He is at last satisfied because he found

## Rex Flintkote Roofing

The test was severe—a dairy where heat, cold, dampness and dust must be kept out. Rex Flintkote Roofing did it. It won't warp, it clings close and fast, and has qualities that insulate against all weather extremes. It resists fire, being made of long-fibre wool, chemically treated, and an ordinary workman can lay it. But what are claims when THERE'S A PROOF:

"I am thoroughly satisfied with Rex Flintkote Roofing. I have sent you a picture of the barn from which you can see that it was a very difficult matter to put a roofing on a building of this shape and have it look well. Rex Flintkote Roofing wears well and makes an attractive roof in appearance when laid. I think that Rex Flintkote Roofing is thoroughly adapted for any farm building. Yours truly, (Signed) E. J. Parker, Grand Isle, Vt."

For those desiring decorative effects we offer a new red paint adapted to Rex Flintkote Roofing. Write us for sample of roofing to test with red-hot coal, also free book on roofing points. For 4c. postage, we will send another free booklet, "Making Poultry Pay."

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Save time, horses, work and money by using an **Electric Handy Wagon**

Low wheels, broad tires. No living man can build a better. Book on "Wheel Sense" free. Electric Wheel Co. Br 96, Quincy, Ill.

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thing can work up a big side line that takes very little time once a month; sewing machine agents, tax collectors, book agents, nursery-stock solicitors can double their business. Instructions and outfit cost you nothing. We only want a reply from you that you are a hustler, and we will do the rest. Write us at once. Circulation Dept.

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wherever planted; are planted everywhere trees are grown. Free Catalog of superb fruits—Black Ben, King David, Delicious, etc.—Stark Bro's, Louisiana, Mo.

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**Our success with Sewing Machines last year was unparalleled**

Every machine that we sent out won unbounded praise, proving unquestionably its splendid value. Our subscribers found that they were actually receiving a highest-grade machine for only two fifths the regular retail price. This year we offer a still more valuable machine. The illustration gives some idea of its appearance, showing the *New Curved Front*, a feature that adds very greatly to the handsome appearance of the machine. The wood is solid, polished antique oak. The illustration shows also the *Patent Drop Head*, which is so valuable in a sewing machine, keeping the running parts free from dust when not in use, giving the machine an extremely neat appearance, and keeping the needle and adjustments out of reach of children. The illustration cannot show, however, the invaluable *Ball Bearings* which make the machine run almost at a touch and practically without noise. Nor can the illustration show the unequalled shuttle device, the patent feed, nor any one of a dozen other matchless points of merit. This machine is worth five of the cheap machines which are advertised by some other publishers.

*We ship the sewing machine prepaid to any point east of the Rocky Mountains.*

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AN ILLUSTRATED FARM AND FAMILY JOURNAL

EASTERN EDITION

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SPRINGFIELD, OHIO, SEPTEMBER 1, 1906

TERMS { 25 CENTS A YEAR  
24 NUMBERS

**G**IVEN plenty of rain, sunshine and an equitable climate, and the possibilities along horticultural lines are practically unlimited. The South Atlantic and Gulf states are particularly blessed in these climatic conditions, of which fact landowners are slowly beginning to avail themselves.

For the past few years, pecan culture has been receiving some attention, but it is yet in its infancy. The main prejudices against it have been the impression that it required a generation to attain a profitable growth and that it was delicate and hard to cultivate. Both ideas are entirely erroneous. It attains a nut-bearing age in from eight to ten years, is quite hardy and tenacious of life.

It thrives on any except exceedingly sandy soil, and seems to have no prefer-

## Pecan Culture in the South

By Rene Bouchelle

variety brings high prices, and the supply is never equal to the demand.

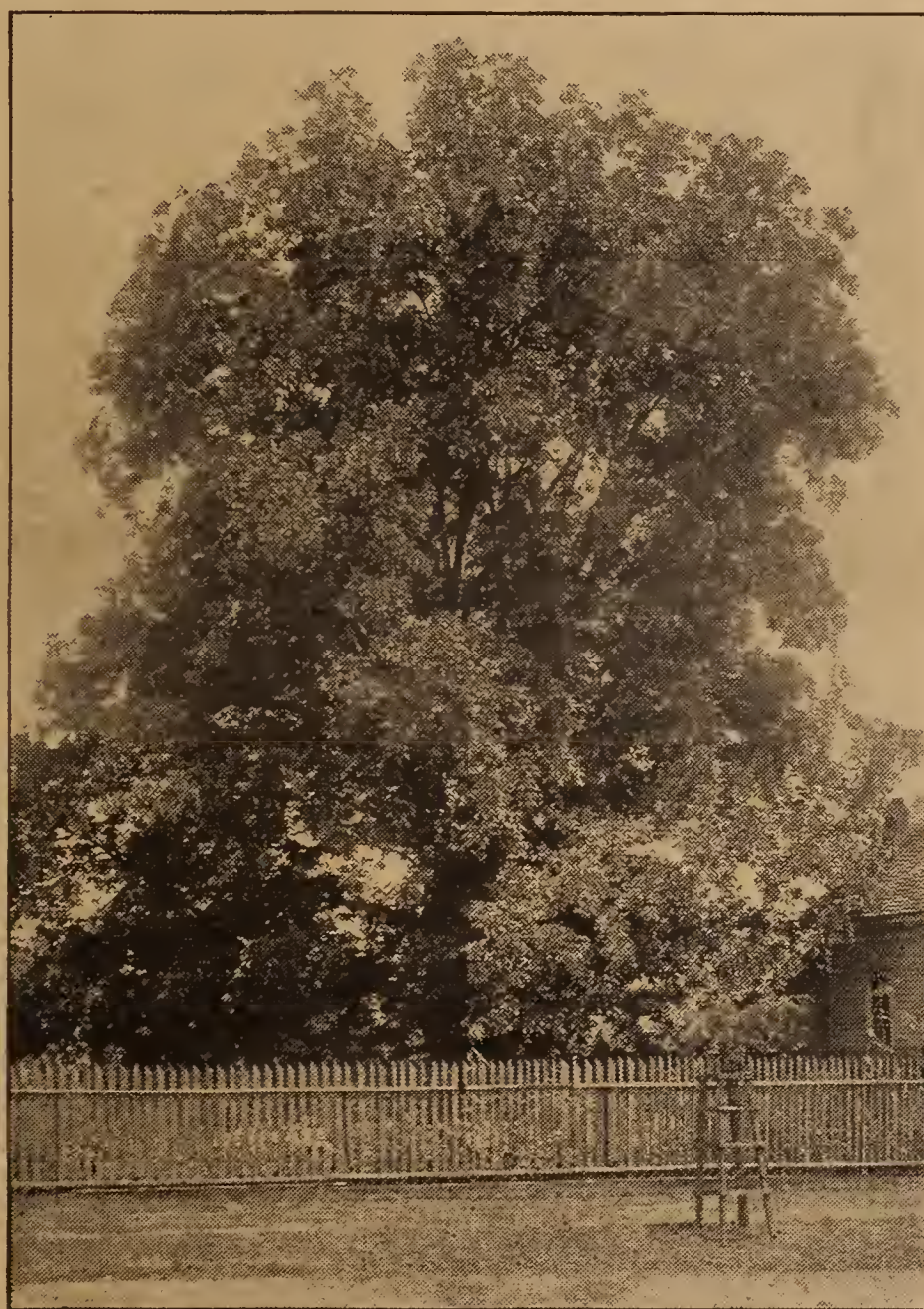
The nuts ripen about the middle of October, and may be gathered from then until December. The smooth, hard bur in which the nut is enclosed cracks open, and it is easy work to shell the nuts out and prepare them for market.

One of the few enemies of the pecan is the fall web-worm. It is best to watch for this carefully, removing the webs as they appear, thereby preventing any harm to the tree.

The much-dreaded San José scale, so prevalent among fruit trees in the South, does not trouble the pecan at all. In one



FROTSCHER PECAN  
—NATURAL SIZE



A MATURE PECAN TREE



PAPER-SHELL PECAN—  
NATURAL SIZE

ence between the lowlands and the hills, doing equally well from the Blue Ridge range to the coast. Like any other tree, it responds to cultivation, though it does not require much fertilization. In fact, the best plan is to plant other crops in the orchard until the trees reach a nut-bearing age, which is in from eight to ten years. This keeps the soil well stirred, and enriches the land sufficiently for the best growth of the nuts. The growth for the first year or two seems slow, as the tree goes more to root than top, the roots growing almost straight down, and sending out very few surface runners.

A good crop to plant in a pecan orchard is the common field pea, known throughout the South as the cow-pea. The roots of this are rich in nitrogen, and no other fertilizer will be necessary, while the hay from the vines can be marketed at a good profit. Two crops of this are made a year.

The trees should be planted about forty-five feet apart, or from sixteen to twenty to the acre, to get the best results. Budded stock is best, and Frotscher is one of the most popular varieties.

When from eight to ten years old, the trees may be expected to bear from twenty to forty pounds of nuts, this amount increasing yearly until the trees reach their full growth, when the average yield is one hundred and fifty pounds to the tree. A net profit of \$500 can be safely counted on from an acre of paper-shell pecans that have attained their maturity. This is a low estimate, as this

instance a pear orchard, badly affected with San José scale, adjoined a pecan orchard without the latter showing the slightest signs of becoming infected.

Rabbits sometimes gnaw the bark of very young trees, but this is easily prevented by tying around the foot of the trees a handful of broom-sedge, which grows so plentifully along the fence-corners in this section.

The pecan stands high among the list of ornamental trees also. The leaves are a glossy, dark green, somewhat similar to the hickory, and the trees are as stately and symmetrical as the beautiful live-oaks that abound throughout the South. Many of the smaller towns are beginning to use them as shade-trees in place of oaks, and in a few years they will become a source of revenue to the far-sighted municipalities. A few nurseries have been started and some groves planted, but there is still much undeveloped territory that might be made to yield a good income at a minimum outlay of expense and labor. The soil is peculiarly adapted to their culture.

### Notes

It has been forty-three years since the Early Rose potato was first propagated by Albert Brazeel, of Vermont, and it is still the most popular early variety.

Merino sheep were first brought into England in 1788, when the king procured a small flock from Portugal. In 1791 another flock was imported from Spain.



PECAN NURSERY OF YEARLING TREES



# FARM AND FIRESIDE

PUBLISHED BY  
THE CROWELL PUBLISHING CO.

SPRINGFIELD, OHIO

Subscriptions and all editorial letters should be sent to the offices at Springfield, Ohio, and letters for the Editor should be marked "Editor," and letters for the Editors regarding advertising should be sent to the New York address.

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The above rate includes the payment of postage by mail. All subscriptions commence with the issue on press when the order is received.

Subscribers receive this paper twice a month, which is twice as often as most other farm and poultry journals are issued.

Payment, when sent by mail, should be made in Express or Post Office Money Orders, Bank Checks or Drafts. When none of these can be procured, send the money in a registered letter. All postmasters are required to register letters whenever requested to do so. Do not send checks on banks in small towns.

Silver, when sent through the mail, should be carefully wrapped in cloth or strong paper, so as not to wear a hole through the envelope and get lost.

Postage Stamps will be received in payment for subscriptions in sums less than one dollar if for every 25 cents in stamps you add a one-cent stamp extra, as we must sell postage stamps at a loss.

When money is received, the date will be changed within four weeks, so that the label will answer for a receipt.

When renewing your subscription, do not fail to say it is a renewal. If all our subscribers will do this a great deal of trouble will be avoided. Also give your name and initials just as now on the yellow address label; don't change it to some other member of the family; if the paper is now coming in your wife's name, sign her name, just as it is on the label, to your letter of renewal.

Discontinuances.—Subscribers wishing their paper discontinued should write us to that effect and pay up all their arrearages. If this is not done, it is assumed that the subscriber wishes the paper continued and intends to pay when convenient.

Always give your post office at the beginning of your letter.

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FARM AND FIRESIDE does not print advertisements generally known as "readers" in its editorial or news columns.

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Of course we do not undertake to adjust petty differences between subscribers and honest advertisers, but if any advertiser should defraud a subscriber, we stand ready to make good the loss incurred, provided we are notified within thirty days after the transaction.

## Comment

### Alfalfa as a Weed Killer

FOR a long time practical farmers have known of the great usefulness of common clover as a weed-smothering crop. A heavy crop of clover in its full development so completely shades the ground that young weeds die. There are, of course, a few kinds of strong-growing weeds that live through the smothering ordeal, but most varieties perish.

As a weed killer alfalfa far surpasses red clover. Being perennial it is left to stand three, five, ten or more years. On account of its remarkably rapid growth it gives three, and some seasons four, hay crops between the first of June and late autumn. Now, no self-respecting weed, however vigorous, can stand to have its head cut off close above its feet three or four times during the summer before it ever has a chance to ripen its seed. The annual weeds soon disappear. The alfalfa plant is longer lived than any of our common perennial weeds. Even the strongest-growing perennial weed plants die after a few years unequal struggle in a good alfalfa field, even before the alfalfa plants have reached their full development.

From the very start of a good meadow the weed plants decline, while the alfalfa plants improve under the frequent mowing and occasional disking necessary in good management of the crop. This is a quality of great excellence which new alfalfa growers will appreciate more and more as they gain by experience.

### Money Not the Only Thing

Letters from readers are always welcome. Sometimes they contain valuable suggestions; sometimes sound criticism, and sometimes words of approval that indicate the kind of reading matter that touches the hearts of the readers of the paper. Here is a letter from a Massachusetts reader:

I was very much interested in the article, "The Secret of Boys Leaving the Farm," in August 1st FARM AND FIRESIDE, commencing, "Money is not the only thing." I was more interested than I usually would have been, but an incident in my own home had recently proved that money is not the only thing. I had a visit from a cousin, and at the dinner-table she told of the wonderful success of her brother, of how he had made money clear beyond the majority of men, of the mansion he had built, and of his success in every way. After the children had gone out, she said to me, "I was telling you of brother's prosperity, but there is more happiness under this old roof than in his fine home, and he would gladly give all his money to be loved as your children love you."

My answer was, "He is some to blame." "Yes, he is to blame. He spent all his time making money when the children were small, and now all they care for is his money. They do not even show their father respect."

It seemed so sad, but how many homes are like it in the mad rush for wealth. Everything else is second; but the time comes when money is not all.

### A Tax-Dodging Case

One of the largest life-insurance companies in the West, the Union Central, is now by reason of the recent exposure of some of its business methods a conspicuous example of high financiering. Tax dodging seems to be one of its specialties in that line.

After hearing a hard-fought case in which an able defense nearly exhausted the arts of legal legerdemain, Judge Hoffheimer, of the Superior Court, recently decided that the Union Central Life Insurance Company owed the treasury of Hamilton County, Ohio, nearly \$183,000 for taxes (and penalties) on omitted personal property from 1897 to 1901 inclusive. This decision, moreover, covers nearly all points in a second suit now pending against the company to recover about \$2,000,000 omitted taxes.

The suit just decided was for the recovery of taxes due on money deposited in bank against which the company claimed to have outstanding checks. However, the testimony showed indisputably that thousands of checks for large amounts drawn by the officials a few days before tax day, the first Monday in April, never left the home office, were never cashed, and were mere "phonies" for the deliberate purpose of dodging taxes. The testimony clearly showed that high officials of the company were guilty of crooked book-keeping in an attempt to cheat the county out of taxes due on money in bank. Being a civil suit the question of perjury in falsely swearing to the correctness of the tax returns was not raised.

The Court found that the total amount of bank deposits for the five years wrongfully withheld from taxation was over \$6,000,000 and ordered judgment against the company in the sum of \$182,728.88. The next move of the plaintiff will be to get a judgment for about \$2,000,000 more.

The moral of this is to go to work now for an effective, constitutional tax-inquisitor law to take the place of the Morgenthau law, recently declared unconstitutional by the Ohio Supreme Court on merely technical grounds. This will be important work for the next session of the legislature. Such cases as that of the Union Central ought to be enough to arouse the people of Ohio to vigorous action, particularly the farmers and homeowners on whom the heavier part of taxation has been shifted by tax-dodging schemers. Let the new tax law be just and severe. The polite scamps who sneak out of the payment of thousands of dollars of taxes annually need to be handled without mitts.

J. B. Barnett.

### The Literary Side of Farm-Life

THE other day, while out driving, I passed a farmhouse, on the porch of which sat four persons, men and women. What impressed me about the spectacle was the fact that every one of those four people was reading a book or paper. And they were interested in it, too, so much so that some of them did not even look up when we went by.

Something about the scene called up the days when I was a boy. Of course, I admit that this was a great while ago. You might know that from the little picture which the editor of this paper so kindly puts at the head of my articles now and then. But it is not so long ago that I have forgotten it; and how well I do remember the hunger which gnawed at my boy's heart for something to read in those bygone years. Years? Yes, years! For never in all the years of my boyhood was there a book in our house, except what we borrowed of some neighbor or drew from the little school-library two miles away.

They tell us that some folks are marked with some peculiar scar or other disfigurement. In one case it may be a strawberry mark; in another something else. I am sure if I had any such mark it was the mark in my heart for books and papers. Near us was a good old man who had a few books. One of them was "Uncle Tom's Cabin," another was "Solomon Northrup." These I had borrowed and read till I knew them almost by heart. Driven almost to desperation by my passion for reading, I remember how my mother laughed when I tramped the two miles away and back to the library I have spoken of, and tugged home the first volume of D'Aubigne's "History of the Reformation." Back and forth I journeyed, until I had lugged home with me and read studiously the five volumes of this tremendous work. Think of wading through a series like that! The lad who was set at a task like that in our days would feel that he would rather be confined in Shakespearean fires till the crimes done in his days of nature had been purged away. But even those books were a treasure to me.

Think of the change now. In almost every lad's room now you will find a few choice books, with bright, attractive covers, and as full of interest as an egg is of meat. They are books worth reading, too, in most cases. Stories with historical foundation, of travel or nature-study, written in thrilling style, to hold the attention the while some truth is being imparted.

And such splendid farm papers as we have in these days, too. Do we appreciate them as we should? Not only every phase of farm-life is well cared for, but the home-life, and the higher life as well, are all cared for in the best literary style. The farmer is scarce who does not also have his daily paper and several magazines. Libraries are near at hand now, so that no lad need go hungry for reading matter, as was the case a little while ago.

I said "No, lad," and yet, it may be that was putting it too strongly, for it does seem to be a fact that there are still many farmers who do not appreciate the value of good books and papers for their children. They never had such books when they were young; nor did they feel the longing for reading matter that stirs the hearts of the latter-day boys and girls, so they pass by the demand for these things.

And yet, I am satisfied, that if these men would pay a little more attention to this side of the farm-life they would find that the young people would be much more contented out in the country. Most young folks like to read. Place a good book or an attractive farm paper or magazine on the table, and the hours will pass far more pleasantly.

May I speak once more of my own passion for books long enough to say that it stays with me yet. As soon as I began to earn money for myself I began to buy books, until now I have probably a better library than could be found in the home of one farmer out of a thousand. The money that many boys spent for tobacco and such things I put into books. It is pleasing to think how

many books one may secure in this way if he really sets out about it. The result was that when we came on the farm we had so many books that we had to set apart one little room, just for the library.

Out of some wide cherry boards I made a set of shelves that covers one whole side of this room from floor to ceiling, and there is not a single vacant place in it. In almost every other room there are smaller shelves for books. The boys have their own book-cases, and new books are being added from time to time. And "father's room," with its big rows of splendid books, is the rallying-place for the whole family. Is anyone missing? Look in father's room. Has any article of household use been mislaid? Look in father's room! And the influence of it all who can rightly estimate?

How can it be that the boy or girl with a taste for reading good, wholesome books and papers ever should be inclined to wander away into the doubtful down-town resorts which trouble so many, even out on the farm?

Now I wonder if the editor will kindly spare me the space to make a plea with every farmer who does not now just see the worth of books and papers? Are your boys still safely at home with you? Keep them there by furnishing them with good literature. It will not cost a great deal to have a number of the best farm papers on your table. As the Christmas-times and the birthdays come around give them a new book. Look well to it that there is nothing in that book to hurt more than it helps, for it is a fact that there are to-day many books coming from the presses that might never have been written at all. Those are the ones that plant seeds of evil which will bear terrible fruit by-and-by.

Few farmers are so without genius for the use of tools that they cannot make neat book-cases for the rooms of their boys and girls. The boys can help about this, too. I know of one lad, not yet twelve years old, that took a rough board box and smoothed its sides off nicely, put in two or three shelves, and painted it so that he had for his room a neat bookshelf. Mother tacked a strip of bright-colored cloth up in front for a curtain, and the shelves are already beginning to be well filled with nice books.

If I do not say a word here for the men and women who make our farm papers, I shall not think my duty done. Keep out the questionable advertisements! Life is too precious to be lost for the sake of the few dollars you will get in return for the publication of notices which appeal to the evil side of human nature. Every one of these advertisements comes under the eyes of thousands of young men and women. You would not knowingly harm these boys and girls. But you will do it if you do not cut out every doubtful advertisement. Make the fountain clean. Keep it so.

*Edgar P. Vincent*

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### Political Duties

A SHORT time ago I attended what was termed a mass-convention of voters to select delegates who are to nominate candidates for various offices. The meeting had been advertised, and I supposed there would be a large attendance of farmers and others interested in good government. When the chairman called the meeting to order the "mass" consisted of sixteen people, nearly half of them office-holders who are interested in holding onto their jobs. The men who will be kicking the hardest against the nominations for the various important offices to be filled were absent from the initial meeting, where they could have done something. People who desire good government must attend to their political duties.

*Fred Grundy*



## About Rural Affairs

### The Fly Nuisance

AT THIS time it is a constant fight with flies. If you give them a breathing-spell the poor cows and calves and horses have to suffer, and the supply of milk will run short. It is "fight or lose." The loss to farmers due to the policy of letting things take their course, and flies have pretty much their own way, amounts to many millions of dollars a year.

I do not find it sufficient to just spray the animals with a fly-repelling mixture in the morning and then turn them out to pasture. A few hours later, when I go to look after them in the pasture, they are often black with blood-sucking flies again. So I take a hand-sprayer loaded with a liquid of which kerosene forms a large proportion along, and spray this right upon the flies on each animal. The cows soon learn that your coming means relief to them from the fly-pest, and they hold still while you spray. The flies quickly let go of their hold and fall to the ground when the kerosene touches them. Visiting your cattle once or twice a day in this manner will be a great help to them. The merciful man is merciful to his beast, and he usually gets good pay for it, too.

### Care of Poisons

It is a common thing to have poisons, and often very powerful ones, lying loose on our farms and in farm homes. When we find paris green, or arsenate of lead, or other forms of arsenic, or carbolic acid, or strong liniments, or even cyanide of potassium, etc., standing around on shelves in the barn or pantry, we can only wonder that serious accidents do not occur oftener than they do.

A few days ago a grandchild of mine, a little fellow twenty months old, got hold of a bottle of carbolic acid, drew the cork and emptied the contents all over himself. When found he was unconscious, and it took prompt action to save his life. As it is he is badly burned, and not yet entirely out of danger. We cannot be too careful in the handling and storage of these poisonous materials. At our house we have a medicine cabinet that is kept locked. Yet the bulkier poisons for farm use, as arsenate of lead, etc., have often been placed where the children might have had easy access to them. I shall look out after this.

Every farmer, especially if living at some distance from physicians and drug-stores, should also keep the proper antidotes for these poisons at hand. For most of them, when taken in the stomach, vomiting by means of strong mustard water or other means, and sweet or olive oil given in large doses, or the whites of eggs is the right thing in the right place. The burning effect of carbolic acid is most easily and surely counteracted by alcohol or brandy diluted in water, both internally and externally. In any serious case, however, call a physician as quickly as possible.

### Summer Treatment for San Jose Scale

A reader in Birmingham, Ala., asks for more information about spraying with petroleum, and whether kerosene will do as well or better; and whether it should be applied pure or with water. "Is there anything," he says, "that will kill the scale that can be put on while the trees are in leaf?" On my town lot I have plum and peach trees that I find full of scales. If there is anything that I can work with, without regard to cost or trouble, I want to get it on them."

This is the right spirit. The San José scale is a serious proposition. It is now all over this neighborhood, and seems to have multiplied more rapidly the last year than ever before. The conditions have apparently been most favorable for its rapid propagation.

I sprayed most of my trees, early in May, with crude petroleum in full strength, yet I find some scale on some of the trees, probably where the trees were not thoroughly covered with or reached by the spray. For want of better help, I had to spray with the assistance of one of my boys, a youngster of only ten summers. It was hard work for me, and after working half a day I got so completely tired out that probably I did not do as thorough a job as I should have done. This now means

fall treatment, and probably another application of crude petroleum or something else next spring.

Many of my neighbors are in the same boat, and are anxiously inquiring about means of killing the scale this fall. I used whale-oil soap, one pound to seven gallons of water, as a spray on my currants in full leaf, this spring. It gave the scale at least a setback. I might have used petroleum with even more marked and complete success. I shall do it next spring.

We cannot use oil in full strength in the fall without endangering the trees. Kerosene is not better than petroleum, nor as good, and should always be applied with water or in emulsion. It is especially risky on peach trees. I would advise you to use a forcible spray of clear crude petroleum next spring after the buds have just opened. Earlier treatments are risky and may kill the trees.

Professor Slingerland, Cornell's "Bug-man" (Ithaca, N. Y.), and the entomologist of the Geneva Experiment Station, Professor Parrot, I believe, have recently made some special efforts to find an effective remedy for the scale that can be used during summer and fall. We will try to hear from them in next issue. In the meantime, I will use whale-oil-soap solution.

### Traps for Little Children

Last week a little child, not far from here, who was attracted by the pleasant smell of a kettle of boiling syrup which the mother had placed for a moment on the floor near the stove, dove her little arm full length into the hot liquid and burned it so badly that the shock made an end to the child's suffering a few hours later. Poor child and poorer mother! Think of her mental agony in the consciousness of having set the trap for her own dear little one.

Yet similar accidents happen every day. The busy housewives, who have to handle pots and tubs filled with hot water or suds, often have their hands and minds so occupied that they forget the quicksilver nature of little children, who are here one minute and there the next. These mothers cannot be cautioned too often and too earnestly to keep vessels with boiling-hot liquids, kettles with boiling water, tubs full of hot soap-suds, filled coffee and tea-pots, etc., out of the possible reach of their little children. Mothers, be careful what traps you set for them! The happiness of your whole lives is at stake!

### The Promising Commission Merchant

We have had a few more instances of the doings of the promising commission man who rents a vacant store in the commission district, then solicits trial consignments by circulars and personally, promising top prices, promptly reports sales at outside figures and makes returns at once. But after he has succeeded in getting big consignments and a good lot of them, and sold them at whatever he can get for them, he all at once departs, of course, taking all the shippers' money with him, and not even leaving his address. The papers recently reported the case of a promising youth in Portland, Me., who mulcted the farmers of that state in a very brief time to the tune of \$6,000 or \$7,000 in this manner. This thing is quite common much nearer to us. Beware of the new commission man who promises fancy prices for trial shipments!

### Danger in Lighting Lamps

The lighting of kerosene lamps seems to be a simple thing. Yet nine tenths of the feminine members of the household, whose chore it is to do it, do not know how. The "hired girl" especially finds it hard to understand that the flame will get much larger after the lamp gets warmed up than when it is first lighted. When I come to the house at dusk, after the girl has just lighted the lamps, I usually go from room to room to examine them, and in most cases I have to turn the wick down a notch. Very frequently I find the lamp chimney all blackened, and flame and smoke issuing from the chimney top. Fortunately we try to burn good oil; otherwise there might be an explosion now and then. As it is, however, there is always danger in the careless lighting of lamps, and a trusty person should be given the job.

*A. Greiner*

## Salient Farm Notes

### The Farmer on the Road to Bankruptcy

ONLY a few days ago I received a letter from a farmer who says he has been obliged for many years to crop his land, like a tenant, in order to keep even with the world. Now his soil is so impoverished that he can scarcely make it produce half crops, and he asks what he shall do to keep out of the poorhouse.

By reading between the lines of his letter it was plain that extravagance was at the bottom of his troubles. He spent more than he earned. He has drawn on his capital to support an extravagant family until that capital is exhausted, or almost so. I told him there were only two things for him to do, and they were to economize and farm better. I once worked for just such a farmer, and one day while we were sitting in a shed waiting for a shower to pass, he asked me what I would do if I were in his place. After talking over the situation a few minutes, I trying to dodge his question, he said: "I want you to answer my question square out and out, and no dodging. I want some advice!" I said I would cut down expenses and farm different. He asked me to go into details. I did, and handled the situation without gloves. He declared I was right, and it was just the line of action to follow. That night he gave the ladies of the family a synopsis of my views, and beginning with the following morning they proceeded to make it so interesting that I was glad when my time expired.

When a farmer finds himself on the road to bankruptcy, or is not getting ahead in the world, he should organize himself into a court of inquiry and find out what's the matter. There exists no good reason why a farmer should not do fairly well at the present time, if he has his health and his crops are not destroyed by a severe storm or drought. To be sure, help is scarce and difficult to obtain, but with the machinery we now have one man can do more than two formerly could, and do it better. Then there are advantages in not having any regular hired man. There is a great saving in wages, board, work in the house, and in several other ways. A short time ago I asked a man who formerly kept two hired men, how many he had at present. "Not one," he replied gleefully. "I have arranged my farming so that I do not need any only in harvesting the crops. Then I pay big wages and whoop 'em up and soon clean things out of the way. No more regular hired hands for me! Clover, corn, hogs and a few steers are all I am raising now. Last year my corn on clover sod turned out full sixty-five bushels an acre. This year it will do as well, and next year it will be on land that was two years in clover and this year in pasture. I expect, with no accidents, to get full seventy bushels to the acre." He aims to plant thirty acres to corn each year.

I find that most of the farmers who are having a hard row to hoe are men who are farming more land than they are capable of managing well, or are farming as "most everybody else in the neighborhood is!" That is, farming without sufficient capital to properly till the land they are working and keep up its fertility, or farming without any well-defined plan or method. The man who grows crops that do not bring him a good interest on the value of the land, and fair pay for his labor, is in a losing game, and will go to the wall sooner or later. If a farmer's expenses exceed his receipts, bankruptcy is not far distant. Thousands of farmers would be vastly better off at the end of six years if they would put half their land in clover, cow-peas, or some crop that could be turned down for fertilizer, and farm the other half better. Many of them would have to economize closely a couple of years, but it would pay in the end.

### Advice to Young Farmer

A young Missouri farmer writes to me for advice. He writes that he has a hundred and twenty acres of land which he says is only tolerably good. He is in debt somewhat, but could get out by selling forty acres of the land. He is fifteen miles from a railroad—that means from a market.

He says the land is only tolerably good, and yielded ten bushels of wheat to the acre last year. He sowed clover and timothy with the wheat, and has a good stand. The fact that he has secured a good stand of clover and timothy by sowing the seed with wheat is proof that his land is far from being what is generally termed poor.

He has a mine in that soil if he only handles it right. It may now be exhausted of its wheat-producing elements by continuous cropping to that cereal, but it is still rich.

I cannot understand why a farmer fifteen miles from market should be growing wheat. He is working up-hill. To haul twenty bushels of that wheat to market is a big day's work for a team, and he probably would get ten or twelve dollars for it. He should change from wheat to corn, clover and hogs as soon as possible, and instead of laboriously robbing his land of its fertility, build it up until it will produce not less than sixty bushels of corn to the acre, which he can concentrate into pork and obtain a good price for. He says there is a good spring on the farm. If I were a young man and could get hold of a farm that had a good spring on it, and the land would produce good crops of clover, I should think I was one of the luckiest mortals alive.

He is not heavily in debt, but it seems that his farming has not returned him a sufficient profit to enable him to get out. Ten bushels of wheat to the acre would hardly return him a fair rental after the necessary expenses were paid. He is like hundreds of farmers I know. He would like to make a change for the better, but hardly knows how to accomplish it. He is short of ready cash, and, unless he makes a change, is likely to be still shorter. How he shall make this change depends largely upon himself. If he thinks he cannot change from the mixed farming he has been following, and hold all the farm, he should dispose of the forty acres, pay off the debt, and with the balance put the eighty acres into good shape for corn, clover and hogs. Unless he can clear more of this eighty for cultivation he will be a little short of corn land, because he will have to build that twenty-five acres of soil up with manure and clover or cow-peas, and that would cut his acreage for corn down to a small figure.

If I had the tract I would make a desperate effort to hold it all. I would build up the twenty-five acres with clover or cow-peas—and it seems to me he is in a good locality to use cow-peas with good effect—and grow all the corn I could on the forty, twenty acres two years, with clover or cow-peas on the other twenty, then change about. Plainly he needs fencing, and this he should get as soon as possible. I would use Osage Orange and wire, as explained in FARM AND FIRESIDE of August 1st. While he is getting his farm into shape for hogs he can be building up a herd of first-class stock. Procure a good sow that has been bred, and from the litter pick out the breeding stock for next season. The following season purchase another male. A number-one sow that has been bred can be bought for a reasonable price, and thereafter he could obtain twenty or thirty pound males at a price he can afford to pay. When he gets hold of a fine male it should be kept at least two years. That fine spring will give him an advantage that can scarcely be overestimated. He should fence it in, and so arrange the outlet that the hogs can have pure water to drink at all times.

One cannot tell a farmer living at a distance exactly what is best for him to do in cases of this kind, but we all know that growing ten bushels of wheat per acre on land that is becoming steadily poorer is not a paying proposition, especially when that land is fifteen miles from market. I can see no salvation for a farmer thus situated unless he makes a radical change in his methods. And the change should be to grow crops that will give him a good profit and not impoverish his soil.

*Fred Grundy*

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\* \* \*

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FARM AND FIRESIDE will be sent one year for twenty-five cents or three years for fifty cents. It is growing faster than any other farm paper in the world. Please renew promptly.



## Cutting Up and Storing the Corn Crop

Not until recently has so much value been attached to corn fodder, but now with higher-priced hay, that may be baled and shipped, and with the corn-shredder and its most valuable product, shredded fodder, the crop of corn throughout the corn-growing districts is carefully harvested.

Nowadays we see but few fields of corn left standing to be husked from the stalk, but it is neatly cut up and tied into shocks to be husked later on in the season that it may be preserved for winter feeding.

Upon our farm we begin at planting-time to figure upon the coming fodder crop as well as its output of corn. With a crop of this kind to handle we must expend a great amount of labor, and if the crop exceeds the force of workmen, danger from frosts and overripened fodder must be the result.

This we obviate to a certain extent by planting our fields so that a week to ten days intervene in their ripening, giving us the advantage of cutting the crop in its proper state of ripeness with our own farm force, thus enabling us to do it much cheaper.

We know there is a great amount of the corn crop harvested each year very much too green. This, of course, makes very nice fodder with its green, fresh appearance at shucking-time, but it is not the best of feed. Properly ripened fodder is much more valuable, while the quality of the corn is very much better. It does not pay to hustle into the corn-field until the crop is in proper condition for harvesting, but as soon as it has reached the proper stage then it pays the farmer to devote his whole attention and time to harvesting the crop.

As soon as the crop is in the proper stage for handling, all other farm labor is laid aside in order to care for it, for we have learned that the sooner the fodder is placed in shock after it has reached the proper stage of ripeness the more valuable it is as feed.

Our corn ground is usually sown in wheat after the corn. We usually place the corn in shocks of five by twenty-four hills, making one hundred and twenty hills stored in each. This plan makes the seeding of the ground very easy, and when the corn is removed later in the season the vacant strips are either sown in wheat, or left until spring and filled in with oats in order to keep down the growth of weeds.

Our corn that is shredded into the mows at the barn is usually cut in much smaller shocks, not over one hundred hills at the most, for we want it to cure out rapidly in order that it may be shredded and stored as soon as possible.

If the shocks must stand for any length of time out in the field they should be made much larger. Some seasons we have cut our entire crop up in shocks of one hundred and forty-four hills, or twelve hills square, with good results in curing. If the shocks are securely tied about the tops as soon as put up they will stand all winter, or until husked out, with but little damage from the weather. The greater part of our crop in late years is put into the barn or stack as rapidly as the weather will permit.

This season we shall have several hundred shocks of corn to care for at shucking-time, and we expect to haul it all into the barn upon the low-down wagon and husk it out there. We have a sling that is easily attached to our hay-ropes, and by the aid of the team we hoist our fodder very easily to the top-most part of the mows. This not only saves us much hard labor at pitching, but enables us to fill our barn to its fullest capacity.

When the farmer learns to attach as equal value to the stover portion as to the grain portion of this crop, there will be but little need of any lecturing upon the care and storage of the corn crop.

Ohio. GEO. W. BROWN.

## Draining Grass Land

When one comes across grass lands which bear on the very face of them their undrained condition, one is at once impressed by the worthless nature of the herbage they produce. If the expense of the remedy were out of proportion to the benefit to be derived from it, then I could understand that apathy might be excusable. But as to the greater part of the undrained grass land which is now lying in a comparatively unprofitable condition through excessive moisture, there is no doubt that the vegetation can be immensely improved in quality. Drainage of pastures has never been known to be other than beneficial; and in most instances the quantity of hay or feed will also be greatly

## Farmers' Correspondence Club

augmented, although for some land already giving a large bulk of herbage of a low quality no immediate increase may be apparent after draining. The total bulk may even be temporarily diminished. But the loss will be confined to those plants which possess little or no feeding value, and therefore regret need not be expended on their disappearance; and, as a rule, the work can be carried out at a cost which will be returned with interest in the course of a few years. Drainage alone will go a long way toward turning a marsh into a profitable pasture, and it renders other improvements possible at a trifling expense. Every year more water passes through land which is naturally or artificially drained than through soil which is generally saturated with moisture.

Where stagnant water lies no rain can enter; it simply runs off the surface by any outlet it can find. The soil can neither properly appreciate any fertilizer applied to it, nor is it capable of utilizing the sun's heat for the development of plant life. When rain falls on a well-drained field, it does more than merely moisten the soil and supply plants with water. It has been computed that in each year by rain and snow alone ten pounds of nitrogen are deposited on every acre of land in any district having an average rainfall. Indeed, rain carries into the soil a very large amount of the atmosphere, and this is one of the benefits which result from good drainage. The oxygen sweetens and converts injurious organic substances into wholesome food for plants. At the same time carbonic acid gas derived from rain and air performs the same operation for the mineral constituents of the soil.

Another advantage which results from draining is an increase in the temperature of the soil. It is well understood that evaporation produces cold, and the more rapid the evaporation the greater the cold. People who have traveled in tropical climates know that water is often drunk from porous jars, and is delightfully cool, even when the thermometer may register one hundred degrees. This is an illustration of the conditions which prevail on a hot day with water-logged land. The more scorching the sun, the colder the soil becomes immediately beneath the surface. The sun will make the top crust feel warm to the touch, even when full of water; but if you put a thermometer through into the subsoil it will be found to be intensely cold. The temperature cannot be increased by rain, for warm water is never known to descend naturally. The rainfall remains on the surface instead of sinking into the soil and raising the temperature in addition to its many other benefits.

When the sun's rays cease to fall on undrained land, the cold subsoil quickly brings the surface to its own low temperature. Surely, therefore, there need be no wonder that under these adverse circumstances the grass on badly drained land is late to begin growing in spring, and early to cease doing so in the fall.

A well-known European scientist has clearly shown that there is an intimate connection between a warm, dry soil and economy in cattle feeding. Friable lands absorb more heat than land which is saturated with moisture, and retains the heat for a longer period. Upon the one animals lie warmer, especially at night, than they do on the other. Now a large proportion of the food consumed by animals is utilized for the production of the heat which is constantly given out from their bodies. Therefore it follows that additional food becomes necessary to replace the animal heat lost by the colder surroundings. Land which is properly drained comes under the influence of another operation of nature, to the great advantage of the crops upon it. Water would, after it has passed through the surface to the subsoil, be lost to plant life, were it not for the wonderful natural arrangement known as capillarity. As the surface soil becomes freed from water, it draws up, and re-absorbs moisture from below; and it is especially when the soil becomes dry, and its particles are broken up, that it possesses this power. The water which is thus brought from the subsoil contains some of the mineral constituents from the formation below, which further aid the growth of plants. This fact accounts for the widely different grasses which are to be seen in old pastures on surface soils that appear to be identical.

The mineral constituents in a state of solution are brought up by the water from considerable depths, and by this means, among others, the geological stratum asserts its influence upon the herbage grow-

ing on its surface. It is a great mistake to suppose that the rainfall goes direct to the drains, and so is at once expelled from the land. On the contrary, the rain sinks into the land until it meets and mixes with the subsoil water, and the drains do not begin to run until the water rises above their level; and while water, however small the quantity, is flowing in a drain, and probably long after it has ceased to flow, it may be taken for granted that the subsoil is saturated with moisture up to the level of the drains. The rise and fall of the subsoil water are therefore determined by the level of the drain, rather than by the surface of the soil, as it would be if in an undrained state. Thus on well-drained land the atmosphere is being continually carried into the soil by rain, and forced into it by the atmospheric pressure, as the subsoil water falls to a lower level, and the air is expelled when the water rises.

Canada.

W. R. GILBERT.

## Winter Oats

At this writing, July 30th, the oats crop is practically harvested. As a rule, oats are light in this part of West Virginia. The fall-sown winter oats were ready for harvest by July 1st. Spring-sown winter turf oats were ready for harvest by the middle of July, or a little earlier, and early-maturing spring varieties were ready for harvest about the same date. Some oats were not ready to cut until the 20th to the 25th of July.

The fall-sown oats were tolerably good, especially those sown early; the spring-sown winter oats were better than the regular spring varieties.

I believe I wrote to the FARM AND FIRESIDE of a small plot of Appler oats that I sowed last fall to test with the Virginia gray or turf oats. They were sown early in September, stood the winter well, did not tiller so much as the turf oats, did not grow nearly so tall as the turf oats, filled tolerably well, and ripened by June 25th. The experiment did not prove very satisfactory, but they may do better another time.

By the way, we often abandon an experiment before a fair trial is given, and new varieties often get bad names before thoroughly tested.

There are many places in the United States where winter oats cannot be grown, and yet, there are other places where they have not yet been introduced that they would prove a more profitable crop than the spring varieties.

West Virginia.

A. J. LEGG.

## Seed-Corn Advice Qualified

Occasionally a writer advises the selection each season of seed-corn from those stalks that have produced two ears. By following this practice it is affirmed that a tendency to put forth two shoots will be established. If this be followed for a sufficiently long period there is little doubt that the proportion of stalks bearing two shoots will be increased. It seems to be implied that such a multiplication of shoots will unquestionably increase the yield.

It is generally conceded by those best acquainted with the capacity of the corn-plant for improvement, and at the same time best aware of the various conditions under which the corn-plant thrives to a greater or to a less extent, that such advice is not safe, nor should it be unqualifiedly followed.

In the Southern states, corn generally puts forth two or more shoots. Cocks Prolific is regarded as a proper variety in the South, where it bears as many as five shoots of varying size. Yet, when this corn is brought to Ohio for cultivation, it fails to mature, because it has become acclimated to the longer season and more favorable conditions of the South. Under those conditions it produces well, but under less favorable conditions it makes too luxuriant a growth and sets forth the beginnings of a fruitage so large that it cannot be brought to maturity.

In Northern soils nitrification is slower, because the degree of heat is lower and less uniform, and the season is more retarded. Exhalation and evaporation of moisture from the leaf surface of the plant is slower, consequently the volume of sap handled by the plant is less, and the nutriment in solution are correspondingly diminished. Therefore, it should be observed, that the assimilative process on the whole, is conducted on a smaller scale; in fact it is

nature's own provision to limit the size of a plant and the amount of fruit to the plant's capacity to furnish material for that plant's and that fruit's proper and full development. The setting of an abnormal number of fruits on any plant results in a stunted nourishment and in the production of an inferior product.

In the Northern states actual conditions rather than theory or ideal wishes have determined the nature of improvements possible in the corn-plant. The endeavor to apply Southern practices in Northern corn-fields was early demonstrated to be disastrous; somewhat less disastrous, also, was the assumption that corn developed in the West could be raised with equal success in the East. In Northern latitudes the development of corn and the increase of yields have been sought and accomplished in perfecting the single ear on a stalk, and in eliminating the barren stalks. To the accomplishment of the best and most permanent results in this development, the consideration of two or three shoots to a stalk is distracting.

The problem for the Northern corn grower is now that of enriching his soil and of improving his cultural methods so that this ideal corn-stalk with its single perfected shoot may be properly nourished. Thousands of farms in the North fall far short of doing justice to the capacity and possibility of the improved corn-plant. To seek greater prolificacy in an increased number of shoots on the corn-plant is futile under such conditions; fact cannot be overturned by blind and misguided enthusiasm.

It is well for the corn breeder and the practical corn grower to have deference to the fundamental principles of plant nutrition, and to know that a great capacity to take and assimilate plant food amount to nothing if the problem of supplying these nutrients to the plant be not given equal regard.

Ohio.

GEO. P. WILLIAMS.

## A Successful Fight with Gophers

Several years ago in my California garden I had a plague of gophers. They undermined the whole of it, so that wherever anyone stepped the ground sank a few inches. The destruction they worked was frightful—eating plants below and above the surface. They managed to keep entirely out of sight, however.

On one occasion I noticed the sand with which they had, in their usual way, closed the mouth of one of their holes, moving. I gave it a blow with a heavy stick and killed a gopher. From that time they disappeared till years after, when there was another invasion of the pests. Their greediness and activity were surpassing and it seemed as though nothing would be left in the garden. Carnations and lobelia were their special favorites.

A gopher trap was set again and again, but they only seemed to laugh at it, covering the trap with dirt and running over it. Pieces of carrot and other vegetables, also raisins, were hollowed out, filled with poison and put down in the holes without effect. They seemed to have taken possession, and as though nothing would rout or disturb them.

Seeing their partiality for lobelia it occurred to me it might be made a vehicle for poison, but the question was how to make the poison adhere to the plant. I had heard gophers were fond of sweets, so I procured one of the strongest poisons, cyanide of potassium and mixed it up in honey. Then taking sprays of lobelia (the little left of it) I smeared them in the poisoned honey and placed them in the gopher holes. That settled them; there were no more signs of gophers.

California.

E. S. RYDER.

## Disk Before Planting

It is an excellent plan to go over your corn plot with a disk before plowing. We need to make our seed-bed like a garden. It is easier to plant, easier to harrow after planting, the corn comes up quicker, grows faster, puts dollars in your pocket and a smile on your face that keeps the household brighter. Every corn grower knows, or ought to know, that the seed-bed should be as mellow as possible. Many corn growers do nothing more to their corn land than to break the stalks some frosty morning in March. Of course if the rainfall is sufficient to keep the top of the land moist, it may not be necessary, but sometimes the land dries very quickly and a crust forms on the top of the land, and then the disk is almost a necessity. It is not necessary to run the disk deeply; just enough to make a little coating of fine clods, and that keeps your land moist enough so that there will be no lumps when plowed.

Illinois.

U. S. ELLSWORTH.



**Alfalfa Hard to Spoil**

ONE great advantage that alfalfa has over common red clover is that the hay is damaged much less in rainy weather. An Ohio contributor to the "Rural New-Yorker," Mr. John M. Jamison, gives his experience:

It is very hard to spoil alfalfa so badly that the stock will not eat it. A friend who had cut his first crop and got it wet sent his men to haul it off the field, and throw it in the stream adjoining. Before they were done he went to the field and was surprised to find that it was good hay, and had the remainder hauled to the mow. Afterward he pastured the field with his cows, and they waded in the mud four inches deep to eat what was thrown away, and cleaned up all they could get. My second cutting, July 2d, was in part put in cock the same day, a part in windrow, and remainder in swath. It rained the night of the 2d, which kept us out of the field till the 4th, when it was all cocked up. It remained in the cock till the 10th; had several rains on it. That put in the cock first was moldy on the outer edge to some extent. All was tough and damp, too much so to stack without airing out. I think there were at least ten tons of it. My men went over it three times in less than two hours at a cost of about 25 cents a ton. This put it in fine shape for ricking, and it would have taken a close observer to discover that any of it had been moldy. Past experience leads me to believe that it will come out of the rick with a fine flavor and good color. Last winter I had some out of a stack that I thought too moldy to feed to my fattening lambs. A neighbor came to my lot, and on seeing the hay said he had fed worse. So I put some of it in a rack in the lot. For the next five hours about forty lambs stood at the rack eating it; the white mold would rise from some of it while they were eating. I feared evil results, such as wool slipping, etc., but they did not materialize. It is the most palatable feed that we can grow.

I had four or five acres lie in the swath four days, because it rained so much that I could not take it up. When I could care for it it made good hay; the way the animals ate it was proof of its quality. Some men balk at the expense of airing it out. If they would get down to figures and not imagine so much to arrive at conclusions they would find that in most cases the stirring is a light expense when it marks the difference between poor and good hay. The universal testimony of men of experience whom I have talked with is that they can cure it in bad weather much easier than they can clover. Clover that lodges will blacken. If it is wet in the windrow or cock it will blacken. Lodging alfalfa does not blacken it, and it takes an immense amount of rain to blacken it in windrow or cock, more than I have experienced in handling it for nearly five years.

**Substituting Alfalfa for Grain**

In the "Practical Farmer," Prof. A. M. Soule gives the following account of two experiments made to determine the value of alfalfa and cow-pea hay as substitutes for grain. He says:

Two experiments have been made in my own experience to determine to what extent a roughness rich in protein may be substituted for a concentrate like wheat bran and cotton-seed meal. These experiments were conducted while I was connected with the Tennessee Experiment Station, and the results were published in bulletin form. Twelve cows were used in each test and each experiment covered a period of one hundred and twenty days. In the second experiment the rations fed were silage, wheat bran and cotton-seed meal; silage, alfalfa hay and cotton-seed meal (that is, alfalfa hay finely cut in the place of wheat bran), and silage, alfalfa hay and wheat bran (that is, finely cut alfalfa hay in the place of cotton-seed meal). The cows did well on these rations, and some of the conclusions drawn from the experiment were as follows: A ton of alfalfa hay can be produced at a cost of \$3 to \$5. Wheat bran costs from \$20 to \$25. From three to five tons of alfalfa hay can be obtained

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from an acre of land, hence there is a great advantage in the utilization of alfalfa in the place of wheat bran. Alfalfa can be substituted to better advantage for wheat bran than for cotton-seed meal, as the latter is not so rich in protein. The substitution of a roughness rich in protein for an expensive concentrate will enable the dairyman to make milk and butter at a low cost, but it should be borne in mind that there is a limit to the substitution, as a cow will probably not eat more than twelve or fifteen pounds of finely chopped alfalfa hay. These experiments indicate that with alfalfa at \$10 a ton and wheat bran at \$20, the saving effected by substituting alfalfa for wheat bran would be \$2.80 for every 100 pounds of milk, and 19.8 cents for every 100 pounds of butter. When alfalfa was fed under the most favorable conditions in this experiment, the cost of a gallon of milk was 5.7 cents and of a pound of butter, 10.4 cents. Where pea hay was fed the lowest cost of a gallon of milk was 5.2 cents, and of a pound of butter, 9.4 cents. The results with alfalfa and pea hay were practically the same. These investigations, carefully and thoroughly conducted, convince us that a roughness rich in protein can certainly be fed in place of a part of the wheat bran, cotton-seed meal or other expensive concentrates so generally employed by the dairyman, and certainly put a premium on the production of alfalfa in sections where dairying is practised extensively. It should be borne in mind, however, that the quality of the alfalfa hay will vary a great deal, depending on the per cent of leaves preserved in curing the hay, and on the

cases, of course. This is written from the dairyman's standpoint who has animals that can very profitably consume this feed. There is just one other consideration, but that is an important one. To buy good, clean new clover seed is almost impossible, and we very often bring to our fields the vilest weeds in the purchased seed, and then spend time and time again to eradicate the foul stuff. This was my experience many times over, though I purchased the highest-grade seed from the most reliable dealers I could find. From this standpoint seed for our own use is worth more than market prices, and oftentimes as a matter of self-protection we must produce our own seed.

The second-growth clover for hay should be cut when in full red bloom, with but few brown heads, and cured in the cock. It should never be sun dried, as that renders the finer and better parts so brittle that much is lost in storing.

**Consider the Corn Fodder**

In view of the certain shortage this year of the hay crop, "Wallaces' Farmer" gives the following timely advice in regard to saving and using corn fodder:

We know just how difficult it is to get the average farmer to harvest his corn. It is hard work any way you take it. It is likewise expensive. It costs money to own or hire a corn-binder. (There will not be enough of them this year to go around.) It is hard work to go into the corn-field with the knife and put the corn in the shock; and it is awfully hard work

of both hay and oats, timothy hay will meet with a brisk demand and bring a high price.

This shortage can be made good in but one way, and that is by the substitution of corn fodder. We expect this year to hear of baled corn fodder selling at a good price in all the leading markets. There is no reason why it should not. It has never been appreciated at its full value, and perhaps the shortage of hay this year will in the end lead to a better system of farming by utilizing the whole instead of two fifths of the corn crop; for two fifths of the feeding value of the corn crop is in the stalk and but three fifths in the ear.

With these generally known and admitted facts staring us in the face it is well worth while to consider whether it is not a good year to sell the timothy hay and replace it with corn fodder for use on the farm. For all kinds of farm stock it is better than timothy hay anyhow. There is more waste to it; but there is more of it on an acre, and it is safe to say that there is at least the feeding value of a ton of timothy hay on every acre of corn that will average forty bushels this year. It can therefore be sold at a profit; just how much it is not worth while to figure, for conditions vary with different farms and localities.

It is worth while, however, for the farmer to figure as to what it will cost him to fill up his barns with shredded fodder; and, if he should have a surplus over and above the requirements of his stock, what it will cost him to put it on the market and sell his timothy hay. The facts are not difficult to obtain. Every farmer knows approximately how much it will cost him for twine, how much for the harvesting and how much for shredding.

**Economical Application of Manure**

In the "National Stockman and Farmer," Mr. P. Clawson makes a good point on the application of stable manure. He says:

The application of manure is regarded by most farmers like the spending of money—anybody can spend it, the only thing is to get it to spend. A little thought leads us to believe that it requires even better judgment to spend money correctly than it does to acquire it; even so with manure, the wisest uses that can be made of it call out our best judgment. To Mr. T. B. Terry we owe the teaching of growing clover with it, by applying it to the young plants, and no man has done our state more good in this



A KANSAS STOCK FARM

condition at the time of cutting. Alfalfa, to give the best results, should be cut when just coming into bloom. Unquestionably the cost of producing milk and butter can be reduced considerably by utilizing alfalfa judiciously, and though this is a difficult and expensive plant to start in many sections, particularly if the land is not very rich, perseverance and the judicious use of commercial fertilizers, green crops and farmyard manure will enable many a dairy farmer to grow from five to ten acres of alfalfa successfully.

**The Second-Crop Clover**

Mr. L. W. Lightly, in the "National Stockman and Farmer," discusses the question of saving the second crop of clover for seed or hay as follows:

During a fair season the second growth of clover will often make half as much feed as the first and sometimes almost as much. In other words we get from a ton to a ton and a half to the acre. I am asked if the seed is more profitable than the hay. Usually in this section we do not average over a bushel of seed to the acre, more often under. The average price for some years was about \$6.50 for good seed (last season was an exception). The hulling and cleaning costs us from \$1.50 to \$3 per bushel, depending on the quantity of seed and other things. Thus we make from the seed less than \$5 per acre, while a ton of rightly cured second-growth hay is certainly more valuable.

In fact, from my experience, I conclude that for dairy cows or growing stock it is far superior to first growth, and I realize more than twice as much from the hay as from the seed in a series of years, considering harvesting expenses in both

to get it out of the shock and feed it to the cattle when snow has fallen and melted and frozen the stubs fast to the ground. It is not easy work to shred it, and besides it is expensive and dangerous for the feeder unless done on an improved machine.

Notwithstanding all these difficulties, this year we urge almost every farmer to consider the corn fodder, and ask himself whether it will not pay him to get a harvester and shred, or feed otherwise, a considerable portion of it at least.

The following is a statement of present conditions: In the corn surplus states we have had no less than eighty per cent of the average rainfall for the growing season so far. The hay crop is short; just how short no one at present knows. The Hay Association, representing all parts of the country, at their recent convention, estimated the hay crop at seventy-five per cent. Over the corn surplus states it is doubtful if it is over sixty per cent. Minnesota and the Dakotas and the alfalfa regions fare better. The state of Maine is the only one of the older states that has a full hay crop. There is a remarkable shortage in clover, due not so much to the dry weather as to the fact that over a great deal of the country we had a warm February and a cold March, which destroyed a large per cent of the stand over the corn surplus states. It is a very rare thing to find a clover meadow that will go two tons to the acre, and most of them will not yield over one.

The same causes that lead to a shortage of the hay crop have led to a shortage in the oats crop. It is short in the straw almost everywhere, and only moderately well headed. Both hay and oats straw, however, will be of very superior quality this year, and on its merits the hay will command a relatively high price, even if there was a full crop. With a short crop

line, but like the darky's rabbit pie, what if you can't "catch" a stand of clover? There is no question but to increase our clover crop is like increasing the multiplier in mathematics, and that young plants, like young animals, demand the tenderest care and the most digestible nutrients. To supply this should be our ambition. To apply manure to clover sod preparatory for corn is too extravagant to be profitable. One load of manure applied to produce clover will multiply the corn-producing power of the land, some ten, some twenty and some an hundred fold, while if applied direct to the corn crop it can not produce more than it contained when applied less the leaching. The systems of farming vary so much that each one must study out how he can best reach this point. We silo our corn, and with a spreader apply the manure to the corn stubble, either before or after the seeding as moisture and mechanical condition of manure suggest. Should our supply be inadequate the remainder is top-dressed during the winter, but we much prefer the application at seeding-time, being sure to apply sufficient to start both grain and grass crops. For the seeding of fall-sown grasses this is ideal, and we believe we are nearing an age when the fall seeding of even our clovers will be taught.

**The Farmers' Endless Circle**

If you wish to prosper get into the farmers' endless circle as soon as you can. Here it is: Better feeding followed by better manuring, followed by better crops, which makes possible still better feeding and more stock, followed by still heavier manuring and still larger crops, and so on. The first arc of the circle is to feed better, but high feeding only pays with good stock.—American Cultivator.



## Use and Effect of Hen Manure

**H**EN manure is something we want to get rid of, and this quite promptly and frequently. Once every week or two is none too often for the good of the fowls in hot weather, unless we keep the droppings sprinkled with superphosphate or something else that acts as a disinfectant. We also want to make the best possible use of it. If there is any virtue in it we do not want to lose it. I always put the stuff directly on my garden patches here and there, as land becomes available for replanting.

Early in June I gave my lima-bean vines, then small plants, a dressing of hen manure that happened to be left over in barrels from the winter accumulations, putting a small shovelful around three or four plants in the row. This dressing was afterward worked into the soil with the cultivator and hoe, and for some time no visible trace of it has remained, except that we see its marvelous effect in the growth of the vines. I have not often seen such a mass of foliage and long strings of large pods, running from the ground up to the top of trellis, nor such a mass of bloom.

Since then I have been putting the cleanings of the hen-house on various crops, around tomato vines, cucumber vines, celery, etc., and always, at least in a favorable (reasonably wet) season, with marked effect. Let no hen manure go to waste!

## Spray Effects on Potatoes

Whether it is cause and effect, or merely coincident, I can record the fact that the only row of potatoes on my place which did not receive any spray whatever (Early Ohios) was the first to show a serious outbreak of the early blight. A few plants at one end which were given one spray application with soda-Bordeaux mixture, while I was passing to another patch, loaded knapsack on my back, still remain green at this time and free from blight. It looks rather favorable at this time for the arguments of the spray advocates.

## Selecting Seed Potatoes

The best time to select the tubers for our next season's planting is right at the time the potatoes are dug in the fall. I usually dig the potatoes as soon after the tops have died down as possible. The tubers at this time have their full development, and while they would suffer no harm should they be left for a few weeks longer in the ground, weeds are liable to spring up, and in the short time of two weeks grow large enough to make the job of digging much harder. Potatoes promptly dug when nearing maturity also make the best seed.

One advantage of selecting the seed at digging-time is that the varieties are then easily recognized, so that the stray admixtures can be rejected, and pure stock secured, which would be a much more difficult task if we were to put the job of picking our seed potatoes (out of the bins) off until spring. I also reject all tubers from every hill that is weak and gives an immoderately large number of small potatoes. I prefer to take my seed potatoes from the best yielding hills, such hills as give the largest bulk of fair-sized (not necessarily mammoth-sized) potatoes. Henceforth, with my past experience to back me up in this view, I shall be very particular in regard to the seed I save.

## Handling the Potato Crop

An Ohio reader of "American Agriculturist" says:

"Plant only good seed of heavy-yielding varieties. Have your soil well drained. Fertilize as heavily as you think need be, then apply the same amount a second time. The extra yield of the crop will more than compensate for this. All but the more soluble parts of the fertilizer will remain for future crops. Break the potato land early and deep. Pack the soil as little as possible. In preparing the surface for planting, cover the seed four inches deep. Never plant when the ground is wet. Begin cultivation as soon as planting is completed. Cultivate at least once a week, keeping the surface level as long as possible. Harvest as soon as the tubers will not roughen in handling. Store in a cool, dark place. Sell as soon as the price justifies. Don't try to grow potatoes commercially with primitive methods, else you will become disgusted and quit the business."

In the majority of cases the grower loses a good chance when he decides to hold his potatoes for the higher prices of spring sales. The shrinkage and loss usually more than offsets the higher spring prices, provided they are really

higher. If one has to store, the table potatoes may be placed in deep bins in a dark, cool room. Seed potatoes will be all the better if exposed to partial light.

## Second Growth in Potatoes

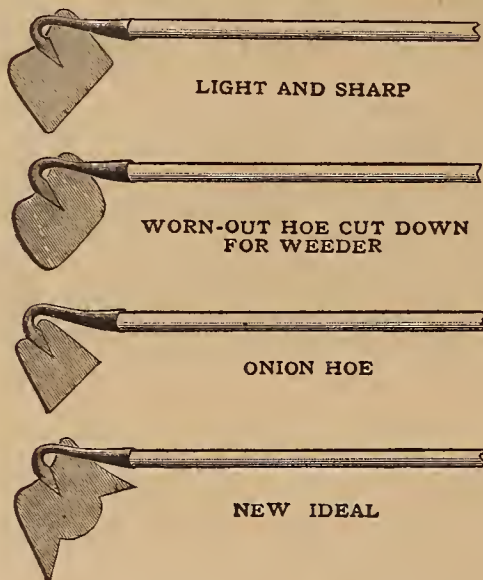
A reader in Richmond, Va., says he has planted a lot of Bliss' Triumph potatoes on well-prepared new sandy land. The vines grew very thrifty and gave promise of a very large crop. On digging he found the tubers were mostly mere sprouts, and finally made a second growth of vines. He desires to know what caused this, and how such abnormal development can be prevented.

I have occasionally found such development, even with the Early Ohio, here. Careful selection of seed, especially the rejection of every hill that shows the least tendency of making a second growth the same season, will surely prevent such trouble for the future.

The Triumph is known to be particularly inclined to grow again the same season, and it is the variety of all others suited for growing what is called second-crop seed potatoes. The potatoes are planted early (in southern localities), and the tubers planted again for a second crop as soon as dug or soon after. I suspect that this variety, having been used so long for this purpose, has had the tendency to make a second growth increased by breeding, until it now amounts to a fault. At least I find that one of our leading seedsmen recommends the Eureka in his catalogue on the ground that it is not apt to make a second growth.

## Hoes for Garden Use

For general use in the garden I like a business hoe, one that is wide, so as to cut over a large surface or move a good lot of soil at each stroke, and sharp, so as to cut deep and easy. A good file ought to be kept near at hand. But we also want hoes that can be used in weeding, and especially in weeding



onions grown by the transplanting method. They stand several inches apart and will admit of working among them with a narrow-bladed hoe. I used to take an old, well-worn hoe, one practically past its usefulness, and cut the blade down at both sides so as to leave it from corner to corner only two or two and one half inches wide, and the corners themselves at an acute angle. A Pennsylvania manufacturing concern recently sent me a sample of a new-style "Ideal" garden hoe for trial. It is surely sharp, and I believe of just the right form to be serviceable for use as a weeder in onions and other close-planted stuff. In short, with hoes of the right kind, it seems to be not much of a curse to be "the man with the hoe."

## Celery Growing

I have had a number of requests for information about celery growing. Later on I shall speak of the modern ways of raising the plants and managing the crop. At this time we have the crop well under way, and the earliest already banked with boards for blanching. The later celery we usually bank with earth, and for late fall and early winter celery this method really gives the best, sweetest and tenderest stalks.

A reader asks how large the plants should be when banked. I usually let them get eight or ten inches high and then "handle" them, which I prefer to do entirely with the hoe, and which con-

sists in simply drawing some soil up to the plants from both sides of the row. This makes the plants grow upright and compact. They are then left for a few weeks until they have made considerable body, when the soil is drawn up to them, completely covering them to within four or five inches of the tips of the leaves.

*W. Greiner*

## The Use of Colored Cloths in Shading Plants

At the first annual meeting of the Society for Horticultural Science held in St. Louis, December 28 and 29, 1903, the subject of shading plants and the physiological effects resulting therefrom were given much attention. If my memory serves me, one half or more of the papers presented on that occasion treated of some phase of this general subject. Since then tests and experiments have been made by many station workers, and these investigations are not only extending our knowledge, but bid fair to improve our practise in the management of certain crops.

Light is one of the essential elements in the growth of plants. The relation of the plant to light is one of the most important of its life relations. Every intelligent grower of plants knows that excessive light is often injurious, and that insufficient light is a most common cause of abnormal development.

The direct, unobstructed rays of the sun are at times especially inhospitable to plants recently transplanted, to young seedlings, unrooted cuttings, and various delicate-foliage, shade-loving species.

In studying the effects of shade on plants, it is extremely difficult to separate with any distinctness the influence of light and heat and moisture. The temperature is usually the highest where the sun's rays are brightest and least obstructed, at least there is such a close relationship between light and heat that the ordinary or average observer cannot confidently measure the effects of either independent of the other. Light and moisture (especially the water content of plants) are likewise closely related. It seems to be pretty clearly demonstrated that bright or strong light stimulates transpiration and probably evaporation, independent of heat. Thus a plant may be exhausted of water in a low as well as higher temperature. To whatever causes the influences of shading may be ascribed in its last analysis, some of its effects can be foretold with reasonable certainty. Some artificial interferences with the force of the solar rays, when used at the right time and place, are known to be beneficial, others are known to be injurious. In this as with other not well-understood principles and practises, we should "prove all things" and "hold fast to that which is good."

Among the various devices used to modify the force of the sun's light and heat, the ordinary white cheese-cloth is by far the most common. During the present season the writer has made a few simple tests with colored cheese-cloth or what is more popularly known as "bunting." In addition to the ordinary white or uncolored cloth, red, blue, yellow and black cloth of the same texture was tested. The cloth was used in two forms.

Ten light frames, each two feet square, were made. These frames were completely covered over on top and at sides. They were divided into two sets, each set having the same five varieties or kind of cloth.

Under each of the first set of frames there were planted on May 1st, two each of cabbage and tomato plants and some seeds of corn and peas. Under each of the second set of frames there were planted two each of geranium and lettuce plants, and some seeds of beans and radishes. The lettuce, cabbage and tomato plants were selected from some thrifty seedlings that were about four weeks old. The geraniums were from cuttings started the previous winter and kept in three-inch pots. When planted they were well budded, and the main object in selecting them was to note the effect of the shading on the blooming, as well as on the general development of the plant. Care was taken to have all the plants of each kind used as nearly uniform in size, shape and vigor as pos-

sible, the varieties selected were such as are considered standard in kitchen and market gardens.

The colored cloth was used in another form by stretching short lengths at various times over rows of seedlings and a few perennial plants like rhubarb, asparagus, etc. In this case, a single or double width of cloth was placed at various heights above the ground, ranging from six to eighteen inches, with the sides open. Of these latter tests, owing to lack of time, no systematic statistical records were kept.

The month of May last in Central Ohio was probably more favorable than the average May for testing the effects of shade on plants. A brief meteorological summary for the month is as follows:

The mean or average maximum was 83.5° F.

The mean or average minimum was 52° F.

And the general mean for the month was 62.8° F.

The highest temperature was 88° and the lowest 30°.

Ten days were clear, thirteen partly cloudy and eight were cloudy. Rain fell on eleven different days. The total precipitation of the month was 2.47 inches, nearly 1½ inches below the normal for May. From the 9th to the 22d there was not the slightest trace of rain, and of these twelve days eight were clear. From the first day of the month to the 22d, the total rainfall was .76 inches.

This is not the time nor place for minute details of methods or records of the various tests. Some of the more evident results are as follows:

(1) The germination, or more properly called the "coming up" of the planted seeds, especially the corn and beans, was hastened by the black cloth.

The seeds under the red came next in time, but considerably later than under the black shade, and not so uniformly in advance of the seeds under the blue, yellow and white cloth. With these three there was practically no difference in time of germination.

(2) After a few days the plants under the black and those under the red cloth began to show weakness and a comparative decline in rate of growth.

(3) A slight frost on the morning of May 7th quite seriously injured the tomatoes under the white and the blue cloth. Those under the yellow, the red and the black escaped injury, as did the same plants in the uncovered check plot. A hard frost on May 9th killed all of the tomato plants that were covered by the frames. Uncovered plants were nearly all killed, while those covered with cloth stretched a foot or more above the ground with the sides open were but slightly injured.

(4) The early shading of rhubarb with black cloth gave excellent results in the way of lengthening the petiole and diminishing the size of the leaf blade. It also improved the quality by making the stems more crisp and tender. This latter effect was also observed in the shaded lettuce. The results with asparagus were not conclusive, and none of the shaded cabbage was as good as those uncovered. No good effects were seen in the early shading of tomatoes except their protection from frost, and the same can be said of the sweet corn, if we except the hastening of germination.

(5) The geraniums bloomed earlier under the black cloth, but they soon had an unthrifty appearance, made little growth, and a considerable number of the leaves turned yellow.

The geraniums were more spindling or drawn under the blue than under any of the other colors. The same was true of the tomatoes.

(6) There was a greater range of temperature under the black cloth than under any of the others. The red showed the next greatest variation, then the yellow, blue and white.

With the exception of the black shade, the temperature was usually, but not always, lower than that in the midday sun outside. It was always higher under the black cloth.

(7) The plant lice were much worse on the shaded lettuce and cabbage than on the same plants outside. The shaded radishes and cabbages were free from the Anthomyia flies or root maggots.

While the observations made are slight and imperfect, they indicate that black shading may be profitably used as a shade in early spring, and possibly at a later date on certain crops like celery, cauliflower, etc. It may also hasten the maturity of certain vegetables, like tomatoes, when used after the plant and fruit are well developed. Some of the colored shading material may be practically useful in protecting plants from frost, and from certain light-loving insects like the radish fly and the beetle.

WILLIAM R. LAZENBY.





# Letters to Unsuccessful Men *By A Failure*

The failure who writes them is the editor of a county newspaper who gets a lot of fun out of local politics and his twenty-acre farm. He is living, really living; not struggling to form a trust, to break into the Senate or to gain fame at the expense of his health. Good, sound advice and good humor are in these Letters. They will begin early in October in

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## Fruit Growing

### Bananas from Sprouts

T. M. A., Middleburg, Pa.—While some of the bananas that are grown for ornamental purposes grow from seed, and when they have fruited die and do not sprout from the roots, yet the ordinary banana of commerce is a perennial that lives from year to year. But the sprout that bears the bunch of fruit dies to the ground when the fruit has ripened. In this respect the common banana is much like our cultivated raspberries. There are, each year at the same stool, sprouts bearing fruit and sprouts coming on to bear fruit the next year, which will die back to the ground after they have fruited. These shoots in the case of the banana bear but one bunch each, at least this is the case with the ordinary varieties. The common ornamental kinds of bananas which are grown from seed and which are referred to above do not produce fruit of any value for table purposes.

### Transplanting Rose-Bushes

A. S.—To those who are not familiar with transplanting operations, the best time to transplant rose-bushes is in the spring. Autumn planting may sometimes be done to advantage by those who live in a mild climate and are familiar with such work, but beginners had better do such work in the spring.

### Time of Year to Set Out Nursery Stock

M. J. W., Norfolk, Mass.—Most of our fruit plants may be set in the autumn as soon as the leaves fall naturally, provided the ground is in good shape and the work is carefully done. In transplanting in autumn it is very important to pack the soil firmly around the roots. In Massachusetts autumn transplanting should be done by the middle of October, which will leave about a month before the ground freezes hard. It is also a good plan in the case of autumn planting to mound up about the trees and to stake them so that they will not be blown down in the winter.

Cap raspberries should never be set in autumn, as they are very liable to fail when set at this time. Rhubarb is one of the plants that I think should be set out in autumn, as it does much better when set at this time than if set in the spring. In the case of peach and plum trees it is somewhat doubtful if autumn planting should ever be practised with them in Massachusetts, as they are somewhat tender and are liable to winter injury when thus planted.

### Time for Transplanting Raspberries and Strawberries

T. C. H., Temple, Pa.—Raspberries and strawberries are generally best transplanted in the spring, before the growth starts or shortly afterward.

### Oyster-Shell Bark-Lice on Apple Trees

E. P. S., West Newberry, Mass.—A good treatment for oyster-shell bark-lice is to thoroughly scrub the tree with a strong potash solution in winter, and then whitewash every portion of the tree that is infested with the scale. This should be put on in autumn or early winter, after the leaves fall. When this whitewash peels off in spring it will generally take the scale with it. There is nothing that you can do at this time that will destroy the scale and not hurt the tree.

Another treatment for oyster-shell bark-lice which is very satisfactory, and perhaps most practical for you is to paint the tree with a very small amount of kerosene, just enough to cover the scales. This will not hurt the bark and will destroy all the scales it touches. However, the kerosene must not be applied in such large quantities that it will run down the tree and hang in drops on the trunk, as it is then liable to hurt the bark. In order to facilitate this work you could prune back the new growth of your tree.

### Method of Planting Strawberries

M. F., Dayton, Ohio—There are several ways of planting strawberries. They are sometimes grown in hills. In this case the plants are set about two feet apart in rows four feet apart, and all the runners are cut off and the full strength forced into the single plant. In

this way large stools are formed which often produce berries of very superior quality, but I think they are not generally as productive as when grown in hedge rows or matted rows as described further on.

The hedge-row system refers to the growing of strawberries set out in the same way as described above, but allowing the sets to form in a row to a width of about twelve inches, after which all further sets are cut off and the hedge row is produced.

By the matted row is meant where the plants are allowed to cover a space perhaps two feet wide with a mat of plants, and no effort is made to keep the runners cut off.

I think that you will probably get the best results by setting them out in the spring of the year.

It is difficult to recommend to you just the variety that you should set out, but among the most reliable kinds are Senator Dunlap and Splendid, both of which are proving good varieties, and should do well in your vicinity. These should cost you somewhere about \$1 a hundred or \$5 a thousand. They can probably be purchased from any of the prominent nurserymen in your vicinity.

### Kind of Strawberry Plants to Set Out

L. S. K., Alma City, Minn.—Strawberry plants that have ever borne fruit should never be used to start a new bed. For a new bed young plants should be used that have grown the season previous. The plants that have borne fruit have black, wiry roots, while those that have not borne fruit have white roots. There is no danger of being mixed up in the matter, as the roots tell the age of the plants to anyone who is at all familiar with them. In Minnesota the spring is the time for setting plants.

### Boxwood Infested with Scale

W. S. C., Newport News, Va.—The boxwood cuttings which you send on are infested with a scale insect that is not easy to get rid of. The best treatment would probably be spraying the plants in early summer with repeated applications of strong soap-suds made by dissolving one pound white laundry soap in fifteen gallons of water.

For many other plants we find clear kerosene painted on the bark in winter a satisfactory remedy, but I do not know of its being tried on the boxwood. You might try it in a small way with an atomizer, and if successful try it more fully. It might be worth while for you to try a preparation called scalecide.

In this connection it may be interesting to relate an experience I have had with a scale insect which attacked our Scotch Mugho and Jack Pines. This scale appeared about five years ago, and had increased alarmingly, but last year parasites appeared in them and this season we cannot find a live scale on the trees. I think that your case will very likely be similar, as it is the common way with most of our insect pests.

Samuel B Green

\* \* \*

"What's the Matter?"

I feel like tendering a whole lot of sympathy to brother strawberry planters. We received plants from a distance, paid a good price for them, winced at the express charges, set aside some important work to prepare the best spot of land for their reception, set the plants ourselves with toil and care (or had a trusted hand to do the job), going over them carefully and treading the soil around every plant firmly, and yet—they don't come. What's the matter?

In my especial case it was a hard freeze two nights after the plants were set. Thirty dollars worth, one thousand plants—ninety per cent gone up—enough to make a woman weep and some men swear. How was it in your case? Was it the frost, the drying winds, the hot sunshine or were the plants set too deep, too shallow, or was the soil not in good shape?

Anyway, before we take pen in hand with blood in eye, determined to give that fellow who shipped the plants a piece of our mind, let us remember that the plants looked all right when received, and then let us put down the pen and light a cigar perhaps instead.

E. H. BURSON.

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The Cow Always

ANY observant visitor to the large cities must be impressed with the fact that the horse in various lines is being supplanted by the mechanical motor, and I think there is no manner of doubt that for the transportation of heavy loads expeditiously and at a minimum of cost the horse is going to be more and more displaced by the machine. I think, further, that the machine is coming very rapidly countryward; and as its cost becomes more and more cheapened, and its utility adapted to our uses, we farmers will find it supplanting many of our horses, both in the fields and on the roads.

Now, in thus prophetically hinting at the evolution of the motor and its more extended adoption for utilitarian purposes, I am not forecasting "the passing of the horse," nor is it my intention, in finally coming to the cow, to discuss the reasonable possibilities of mechanical motor application to farm needs and conditions.

I may add, however, in passing, that the present good prices for horse-flesh, especially for farm uses, is no proof that the thousands of machines now in use doing horse duty are not the forerunners of displaced horses in the future, for it must be remembered that a very large proportion of the machine owners are rich people who own horses galore, also; and that another large proportion is made up of rich people and fools, who in their manner of driving their machines fully demonstrate they have not wit enough to drive a good horse, even if they had pride enough to own one.

The rag-tag-and-bob-tail contingent of the autoists are not horse people. They even haven't horse sense. Instead of supplanting the horse by the machines, they are wrecking the machines, killing themselves, and, incidentally, a good many humble citizens who walk.

In the section in which I live not one per cent of the thousands of horses and mules in use on our farms are bred on the farms. A good pair of farm horses or mules will cost at this time \$400 to \$500. For the latter price I am sure a traction machine using gasoline or alcohol will be built that, on ordinary-sized farms, will much more than do the work of the pair of animals. The machine motor will do our plowing, our tilling and seeding. It will pull the manure-spreader, the mower the grain-harvester, the hay-loader, in addition to performing many stationary mechanical operations now necessary in advanced agriculture and live-stock husbandry. It in time will probably do its part in the morning and evening chores of milking the cows.

BUT THE COW!

Ah, the cow, nothing may displace her, nothing supplant her. She is as much a farm fixture as the traditional farm mortgage, which she is doing her best to make a tradition of the farm—a memory only; she will displace the mortgage if given a fair field in her race to that end. She has done it time and again. She is doing it, and she grows not weary in well doing. But I think she must often grow exceedingly tired of the handicaps her owner so often burdens upon her, of the neglect she suffers and the indignities of the ignorance of proprietorship fretting her faithful patience.

We may till our land, cultivate the crops, gather the harvest and grind the grain by machinery, but no machine will ever be fashioned to do the work of the cow. We may use small potatoes, corn-stalks and things to make alcohol to run a machine to work a contrivance to milk the cow, but that is, as I have said, mere chore work. The cow herself must make the milk.

Chemically there is nothing in the milk that is not in the water—the cow drinks, the grass, the grain, the juices, saps, fiber, elements she eats, but no artificer, with skill and cunning, can gather those elements from the brook, the air, the growing grass, the ripened grain, the cured hay, the rustling fodder, and transmute them into the milk, the fluid of life given us by the cow. Surely no machine may crowd her out. She is collateral with our civilization, for without primary milk man cannot be well fed, and when not well fed he reverts to type, the savage.

Therefore, the place of the cow in the economy of the universe being fixed, when her end can only come with the final passing of the last farmer—and of all the race, of course, the farmer will be the last man, as being essentially the most fixed man, and as he was the first man—shall it not eminently be in harmony with his work for and with the universe that he shall do a yeoman's work in building and training the cow into a more perfect, and consequently a more profitable animal?

She shall never go out of useful fashion, she shall never lose her place nor her importance, and the man who works for her

betterment and the extension of the use of her products shall not lose his labor.

At a great auction of great dairy cows, I recently saw sold for \$2,500 the finest, the most perfect, the most beautiful cow it has ever been my pleasure to see. She was beautiful and perfect as a great stalk of corn is so, as a field of waving wheat is so, as the pine on the mountain or the oak in the deep woods, fashioned for her life's work. And as I looked at that cow, standing as a model for earnest men to work to, I thought of the thousands and thousands of cows I have seen, grading all the way down from that queen and her class to lowest types of the droves of discouraging, hopeless scrubs.

We can't all buy \$2,500 cows, but we can all get an inspiration from them to lead us upward from the \$25 ones. It is only when men want better that they get better.

That I have a poor cow is not the poor cow's fault, it is my fault. The cow is probably doing the best she can in such an owner's hands. If the owner were doing as well as she, she might have a show of doing much better.

*W. F. McSparran*

Buying a Cow

When you go out to buy a cow, what do you look for? In other words what kind of a cow meets your idea of a profitable one to purchase? Almost every farmer has the pleasing impression that his cows are better than his neighbors', and no matter how honest every man may be, when the cows are bought, you are the one who has to prove whether or not they are profitable. Some say the larger the cow, the more profitable, but the merit is in the cow, and not in the size. The faculty to tell a good or a poor cow by examination



HEAD OF A JERSEY COW

comes from close observation of type, and results that are apt to come from such a type. If one studies his best cows he will observe that they have certain similar characteristics, no matter of what breed or size the cow may be.

The best practical judges do not like the smooth-looking cow, yet she is always the easiest to sell. She carries a good-looking udder, is good-sized, and would make fair beef, but she takes good care of herself before she does anything for you, and a large share of her food goes to supply beef. One likes to see the cow in moderate flesh, not poor and thin from lack of food or care, hips wide apart, thin thigh, large barrel, and the ribs wide apart; a good wide space between the hip and first rib. When one's finger is run along her back-bone the rougher it is the better. The cow wants to be thin just back of the shoulder, so that the back-bone is rather prominent there. If she is thick there do not buy.

Live Stock and Dairy

In buying a cow, one is simply in want of a machine that will work up the food given her into the more profitable product, and the less toll she takes and the less she wastes the better. Practical men have taken pains to observe in their own herds that the unprofitable cow nearly always is thick just back of the shoulders. Look for a small, clean-cut neck, a good, wide, dishing forehead, a good eye, and large, clear nostrils. The Roman nose cow is coarse everywhere else. Good, large, tortuous milk veins running well forward. These indicate that blood flows, and plenty of blood must reach and return from the udder. A cow must not be up on legs too far, as it means that her barrel is too small to bring it close to the ground. Avoid the straight underline.

The real finishing work is in the udder, well up in front and high up in the rear, teats of good size and well placed, and far enough apart so that she can be milked without knuckles hitting.

Fat, fleshy udders are no good; they should milk down well, and be soft and flexible, and have plenty of tissue to perform their work. When you see the cow you want—buy her. A few dollars difference in price is nothing compared to what milk and butter she will give you in a year. We ought to study our cows, and find out why this one gives twice as much butter-fat as the one beside her under the same conditions. There is a reason for it, and nature reveals her secrets to the patient student. When we find this reason we know how to pick out good cows.

W. R. GILBERT.

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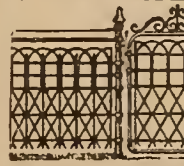
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## The Product and the Cost

IT WILL not pay any farmer or poultryman to produce an article and receive only the cost thereof as his return for the investment of capital and labor in the enterprise. If a flock of hens produce during a certain period of time a number of eggs that pay for the food supplied them, their owner receives no recompense for his labor, and must eventually abandon poultry keeping unless a change occurs in the amount of product.

Before investigations in that direction were made it was usual to estimate five pecks of corn (or the equivalent) as the amount of food required for a hen during one year. It is now the rule to endeavor to learn how much food a hen will consume while producing a certain number of eggs. The Utah Experiment Station has found that, incidental to the production of one hundred and fifty eggs in the course of a year, the average hen consumes eighty-two pounds of grain and meal (or the equivalent), and that she requires six pounds of oyster-shells for the manufacture of the requisite eggshells. This estimate of eighty-two quarts means about six pecks per year, or about one and a half bushels, estimating with corn at fifty-six pounds per bushel.

The quantity mentioned as the food required for a hen, in the course of one year, is not an allowance for all hens, and under all conditions, but it is that which certain hens consumed when they produced one hundred and fifty eggs in one year, according to the experiment mentioned. At present prices, the eighty-two pounds of corn, in the Eastern states, may be valued at about \$1.00, but as prices of corn vary according to locality, quality, supply and season, the value may be greater in some sections and less in others.

Estimating, with the use of corn as a standard for comparison, the production of one hundred and fifty eggs will cost about one dollar, if the actual quantity of corn consumed could be estimated as being diverted entirely to the work of producing eggs, but it must be considered that some portion of the food is required for the maintenance of the hen. It is but fair to assume that corn alone will not enable a hen to produce one hundred and fifty eggs in a year, as it is not a complete food for that purpose, and that (as an equivalent) foods containing larger proportions of protein were employed; also, that the required mineral matter was not lacking in the varied foods used. The six pounds of oyster-shells are not essential in the consideration of the cost, as they serve to assist in reducing the food in the gizzard, rather than to provide lime, the oyster-shells (carbonate of lime) being insoluble, only small quantities of shells entering into the composition of eggshells, the lime in the food being the chief source of supply. Oyster-shells assist mechanically, and as they cost but little, should be used. There are thousands of hens that receive no oyster-shells, and which produce more than the average number of eggs. They must consequently derive all the elements essential for that purpose solely from their foods. Attention is called to this matter for the information of those who are located far away from the source of supply of shells.

If one hundred and fifty eggs will cost \$1.00, and also supply the requirements of the hen during one year, a dozen eggs will cost about eight cents (fractions omitted), the profit on the food consumed being that which is received in excess above eight cents per dozen for the cost thereof, and as it is sometimes the case that a flock of hens will not lay, even when well supplied with food, it is evident that the surest road to success is to resort to foods that are rich in protein, avoiding those materials containing but little protein and large proportions of starch and fat, if possible. A flock is capable of producing more than one hundred and fifty eggs from eighty-two pounds of food, and as the cost of labor is the same for a smaller or larger number of eggs, it is consequently more economical to use the best foods for the purpose, which cheapens the cost and increases the profits.

There is no uniformity in any flock so far as the preferences of the individuals are concerned. Even with the members of a selected breed they will vary in their desires and peculiar individual characteristics. One of the most difficult matters in poultry management is to so feed a flock that each fowl will be satisfied, and all equally assist in giving the farmer a return for his care. That in all flocks, and with the use of any of the breeds, there will be good layers and non-producers, the conditions being alike for all, is a well-known fact, and it demonstrates that if a profit is expected the farmer must be observing and must also feed his flocks with judgment.

Only the farmer who has carefully observed his flock can select the best hens, and to do so he must observe each indi-

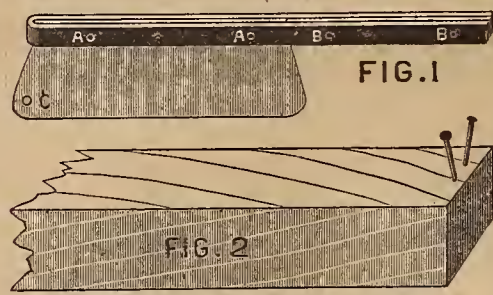
vidual in order that he may know what she has accomplished. It has happened that the best hens were sent to market because they ceased laying after producing more eggs than some hens that were unprofitable, their owner being unable to distinguish them on account of not knowing as much of them as he should. Observation of the flock, of all ages, is the surest means of knowing how to feed and manage for the best results.

The product and the cost are not the same with all flocks or breeds, nor with the individual members of the flocks. An estimate of eighty-two pounds of food per year may be the average quantity required from which one hundred and fifty eggs can be produced, but if the seasons are unfavorable, the pullets hatched too late, the quarters uncomfortable, lice not kept down, and the management otherwise irregular and unsuitable, the farmers may feed twice as much food and receive half the number of eggs mentioned. Profit is the object in all occupations, and business management should be the rule in every branch of farming, especially with poultry keeping, as the hens will nearly always yield a profit if given the opportunity to do so.

## Humane Methods

A reader of the FARM AND FIRESIDE sends the drawing of a very useful article for those who have any poultry to kill, the device shown in the illustration. Take a strip of iron one inch by one-eighth of an inch and thirty inches long, such as an old buggy tire, and bend in the center, so that the straps come parallel, leaving a slot in the center the thickness of the blade. For the blade any sheet of steel three inches wide and nine inches long on top, will do. A piece of an old scythe flattened out, for instance.

The ends of the blade can be beveled or squared, as shown by dotted lines in Figure 1. Fit the two parts together,



CONTRIVANCE FOR KILLING POULTRY

drill holes (A A) about two inches from each end, and fasten with soft-iron or copper rivets. A piece of the same material as the straps can now be cut equal to the remaining lengths of the slot, holes drilled at B B, about one inch from each end and riveted as before. Drill a hole at C for hanging up, sharpen, and the tool is ready for use. Drive two spikes on a slant, about an inch apart, into a block (see Fig 2), and place the chicken's neck between them. In this way the neck can be nicely stretched, and a combination of the two ideas will save both time and trouble.

## Scarcity of Choice Eggs

Strictly fresh eggs are not plentiful in the large cities, and it is seldom that purchasers can secure choice eggs, although the market may apparently be supplied with them. One cause for a scarcity of eggs about this time of year is that matured fowls are being sent to market to make room for early pullets, which do not begin to lay until somewhat later. After the remaining old fowls have finished molting they will begin to lay as soon as they again become full in plumage. In the meantime prices are kept down to a certain extent by eggs of doubtful quality, purchasers not always being able to avoid being imposed upon, but where the choice article is known a good price is obtained.

## Yellow Legs

Hundreds of purchasers rely upon yellow legs and yellow skins as indications of quality in market poultry, when in fact yellow legs and skin do not indicate quality of flesh. On the contrary, the best table fowls are those that have dark or flesh-color legs, such as the Dorkings, Langshan, Houdan, or Pitt Game. In England the yellow legs receive no recognition whatever. The American buyers have their preferences, and if they are willing to pay something for the color of the legs they should be accommodated.

# Poultry Raising

## White Leghorns Versus Mongrels

In a recent bulletin of the West Virginia Experiment Station is an interesting report on a comparative test for egg-production between White Leghorns and mongrels. The following is a summary of the experiments:

1. Fifty White Leghorns were compared with fifty mongrels for one year as to cost of food and egg-production, ordinary care and attention being given them such as they would receive on the average farm.

2. In addition to skim-milk used to moisten the mash, the Leghorns consumed 61 pounds of food costing 85.3 cents, and the mongrels consumed 66.8 pounds of the same materials costing 92.1 cents.

3. During the year the Leghorns laid 116.5 eggs worth \$2.24 per hen, and the mongrels 96.1 eggs worth \$1.78 per hen.

4. The Leghorns gave a profit over the cost of food of \$1.39, and the mongrels a profit of 86 cents.

5. The mongrels gained in weight one pound per head more than the Leghorns. If this increase in weight is taken into consideration, then the Leghorns gave a profit of 40 cents per hen more than the mongrels.

6. The highest prices for fresh eggs usually prevail during the months of November, December, January and February. During these four months the mongrels laid only 364 eggs, and the Leghorns 1029, or practically three times as many.

*P. H. Jacobs.*

## Pigeons for Profit

Never feed damaged grain.

Fancy pigeons, as a rule, make poor squabs.

Pigeons were created for food, and not for show nor pastime.

Keep visitors away from the lofts during feeding time.

Keep the glass in the windows clean, so that the direct rays of the sun can get into the interior of the loft.

There is enough encouragement in pigeon culture to make it a profitable occupation. But beware of false boomers who paint everything in the brightest colors.

If it is desirable to increase the number of breeders, keep the squabs that are hatched in August and September. They will breed next spring.

There is no permanent cure for "going light."

I find that a tablespoonful of the compound extract of gentian to a gallon of drinking water, given once a week during the molting season, is a good all-round tonic.

G. H. R.

By keeping only the best for breeding, and marketing the rest, you will help cull the market of poor, unprofitable breeding-stock.

To be successful in pigeon culture, one must have a fair amount of patience and foresight, and above all, perseverance.

Impure water and poor food are as dangerous to the health of pigeons as is inbreeding.

L. C. Yingling says that in a loft 14 x 9 feet, seven feet high, and a pen of good size, thirty-five pairs will produce proportionately more squabs than fifty pairs would in same space.

A writer in the "American Pigeon Keeper," says: Though we have handled hundreds of birds, we find it impossible to pick out the sexes except when about three weeks old; then the female is generally smaller, and the legs and feet of the male bird are larger than those of the female.

R. J. Barrett says that ten cents' worth of creolin will insure a flock of 400 birds against canker for a year; and two or three drops in a spoonful of water, applied to the throat and mouth with a soft camel's-hair brush twice a day will cure a bird when it is so bad that you are ready to wring its neck. If he finds any trace of the disease, the affected birds are removed and cooped alone, and a few drops of the creolin is put in the drinking water of all the rest; this acts as a preventive.—Farm Journal.

## Feeding Young Chicks

Next in importance to the temperature at which the little chicks are kept is the food which they receive. In the case of a chick, nature provides for its sustenance until it is able to run about and obtain food partly by its own efforts.

The food material thus provided consists of the contents of the yolk sack which is slipped into the abdominal cavity a few hours before the chick is hatched. The yolk sack is connected with the intestine by a duct through which the semi-fluid mass passes into the digestive system where it is absorbed. It is due to this provision that it is not wise to feed chicks until they are two or three days old. If fed too soon or too much there seems to be a tendency for the material which is present in the yolk sack to remain unabsorbed. When this occurs putrefactive changes soon begin to take place, some of the products thus formed pass into the circulatory system of the chick, bowel trouble results, and the chick dies. Not only may the non-absorption of the contents of the yolk sack be caused by feeding too soon or too much, but it is quite probable that this trouble may also be caused by the breeding stock being too fat or otherwise out of condition, or by too variable a temperature or by a lack of sufficient ventilation during the incubation of the eggs.

During the first two or three days after the chicks are hatched they require warmth and the opportunity to gain strength rather than to receive food. They should be supplied with water, however, and it will do no harm if they have a little fine chick grit at which to peck. After the second day they are usually fed as follows:—The infertile eggs are boiled and run through a food chopper, shell and all. The ground egg is then thoroughly mixed with five or six times its bulk of rolled oats. This mixture constitutes the first and last meals of the day for the first two weeks, and is fed on shallow troughs or on plates. At the morning meal care should be taken that the chicks do not eat too much. They should be left somewhat hungry at this meal so that they will exercise during the middle of the day by scratching for the hard grain which is scattered in the litter. At the evening meal they may be fed more liberally on the egg and rolled oats mixture. The hard grain consists of a mixture of cracked corn, cracked wheat, oatmeal, millet seed, broken rice, etc. For small chicks the grains should be cracked fine, the pieces of corn not being larger than one half of a kernel of wheat. At times I have used the prepared chick foods for scratching material and have found most of them satisfactory. The fine cracked grains should be scattered in the litter as often as convenient so that the chicks may be kept busily engaged all day long hunting for the grain, and care should be exercised that they do not find it too easily.

After two or three weeks cracked wheat and cracked corn are gradually substituted for the prepared chick food, and a mash composed of corn-meal, wheat bran, wheat middlings and beef scrap is substituted for the egg and rolled oats.

I have also had excellent results in feeding chicks according to the method advocated by the Maine Experiment Station. Briefly this method is as follows:

A mixture of three parts of corn-meal, one part wheat bran, and one part wheat middlings or flour is used from which to make bread. This is mixed very stiff with skim-milk or water and salted as usual for bread. It is baked in a slow oven, and when done the loaves are split open and returned to the oven where it remains until the bread is thoroughly dry. The crusts are then pounded until they are pulverized. The infertile eggs are hard boiled and ground, shell and all, in a sausage mill. One part ground egg and four parts bread-crumbs are then mixed together and the mixture run through the sausage mill or food chopper.

The chicks are fed in the morning and at night on the bread-and-egg mixture, and during the middle of the day they scratch in the litter for the dry cracked grain or chick food which is provided for them. The egg mixture is used for about two weeks, and although it is expensive when infertile eggs are not available yet it makes the chicks thrive wonderfully well. Grit and charcoal must be freely provided, and after the chicks are a few days old green food in some form becomes a practical necessity. —Bulletin, "Raising Chicks Artificially," West Virginia Experiment Station.



A Tragedy

I stood by the entrance to a great manufacturing concern watching employees pour out of the building. As I watched, the words of a lover of humankind, whose culture had but intensified his pity, rang in my ears: "They are paid barely enough for subsistence that they may be able to work to-morrow. The strong native laborer has been displaced by one nationality after another, as others were found who could live on less. Women have taken the place of men and children that of women."

Most of the children were cleanly but cheaply dressed, for this was a factory where such was demanded. The patches denoted long hours for the mother, who was perhaps an earner also, and must work overtime at night to keep the family clean and patched. I followed a bevy of girls at a distance. They were not more than eight years old, but their faces looked as if they were sixteen or eighteen. They did not skip and jump, as children should, but walked along sedately and soberly, a trifle bent, sallow-faced and sad. And this was during the school months of the year, when children are supposed to be fitting themselves for the duties of life.

If this condition continues, I thought, you will be dead by forty. You will have had no childhood, no girlhood, no womanhood. You will doubtless marry and send others out to gain support for the family, and you yourself will go again as a laborer, because women with children are more desired as laborers. They have a family to look after and are more docile than men. They will endure more, knowing if they complain there are hundreds to take their places.

My musings were interrupted by the "honk, honk" of an automobile. I turned and there bore down upon us a great touring-car filled with a happy, rollicking crowd. There were children, with happy, beaming faces. I happened to know that the owner also owned the factory, and the workers, for that matter. As the car bore down upon us, those crossing the street scattered. One little golden-haired child became confused, stumbled, and the great car crushed it and sped on. I sprang forward to pick up the body, but a man was too quick for me. It was her father.

"Oh God in heaven, can these things be in a nation that calls itself Christian?" I exclaimed.

"They have crushed only the body this time," exclaimed the man bitterly. "They have crushed the souls of the rest." With a heart-broken cry he carried the lifeless child away in his arms.

I turned to the crowd gathered there, saw the firm lips, the determined eyes, and recalled that in Paris, just before the Revolution, a carriage had run over a child. The team halted. "Why the halt," asked the Marquis.

"A child was run over and killed," replied the driver.

"It is strange these people cannot take care of themselves," he exclaimed. "Drive on." The next morning he was found dead with a knife in his heart—stabbed by the father. The man yet lives whose machine crushed out the life of the little one. The father yet works for him. But the mutterings are growing louder. It takes much to grind people into action, but it is coming. God grant there will not be bloodshed. History repeats itself, and one grows anxious at the outlook. Employees have votes, have reason, and a right to more than a mere subsistence. They are being crushed and ground into action. "An eye for an eye, a tooth for a tooth," runs the old adage. It is in the hearts of men to-day as it was ages ago.

Grange Speakers

"It is apparent to any thinking man that the intellectual development of the members of the grange has advanced faster than that of many of those who would pose as teachers and lecturers before grange audiences. We are glad to note that granges will not accept the threadbare talks, antiquated stump speeches devoid of ideas which could in the past be imposed on grange audiences. The audience has ideas of its own, and insists that the persons who undertake to address them be able to give food for thought clothed in pleasing language. The grange speaker must be a thinker and worker or get out of the business. It is the aim of the master to make speaking so difficult and exacting that speakers will have to study and make thorough preparation or give place to others who will. It would surely be an incentive if they could see the letters received in this office. There must be a substantial improvement in the kind of lectures and addresses given to

The Grange

grange audiences in this state."—State Master Fuller, New York.

To all of which I echo a hearty amen! I have incurred the lasting displeasure of some of the speakers by insisting on this very thing. There are two classes of speakers; the one that works for the love of humanity will give something worth while. The other complains of the low price paid speakers, but does the work because there is no other opening, and he must pose as a teacher.

Letters in my office show the desire of young men and women to prepare themselves for speaking, and the popular discontent with the existing order. I have insisted on thorough preparation, and in several instances the students are studying hard, and are ready to make any sacrifice to fit themselves for worthy service. They fear there is no opening and that they cannot get in. I have told them that there was opportunity, but if they attempted anything of value they must expect violent opposition, but not from the great ones who are doing a noble and splendid work. They are always glad to assist, because they are on that part of the ladder where there is plenty of room. The opposition comes from the crowded portion down near the base, from those who fear dislodgment by those who can climb higher. Their fall would be short, but it would be fatal to them.

There are great matters to be discussed. The grange is destined to play an important rôle in the great economic and political contest now going on. It is due it that those who pose as leaders and teachers have something to say that will benefit. If not, then let others have the place. They are coming on. Young men and women are rousing to the need.

There must be study and preparation. The grange insists on it, and is fitting itself for higher duties and responsibilities than ever before. All honor to State Master Fuller, who has had the courage to say what ought long ago to have been said.

Child Labor

It would be far better for the state to contribute to the family the amount the child could earn than to deprive it of the opportunities of securing an education. It would be cheaper to so feed that child as to make it possible for it to get a helpful education than to send it to school starved. We feed men and women in penal and charitable institutions because we must, but fail to see the economy in feeding the child that it may have a healthy body and keen mind. But what is of yet greater importance is to work for economic conditions that do not make child labor obligatory to the support of the family.

State Master Derthick at Home

Patrons who watch with interest the splendid services of State Master Derthick in behalf of the farmers, will be glad to read the following from his home paper:

"The chief interest of the evening was centered in the address of State Master Derthick, who has often proved the exception to the rule that a prophet is not without honor save in his own country. Of all the speakers who are present on grange rally and field days, held from year to year, none are so able to hold the attention and interest as the Master of the Ohio State Grange, though on his native soil. Inasmuch as the farmers and the grange are such a power in the state and nation, why not rally to the front and make our honorable state master the next governor of Ohio? Such a man as Mr. Derthick, with high credit at home and abroad, could not fail to wisely steer the ship of state."

Sunrise Grange

What a happy, prosperous, intelligent crowd was gathered in July at the hall and grove of Sunrise Grange in Champaign County, Ohio. The music and recitations were good. It was a pleasure and honor to be there as speaker. J. E. Wing, alfalfa apostle, and family were there. They are held in high esteem by their neighbors. Mr. Wing told one of his simple tales of the making of a wagon-road. It moved the hearers to laughter and to tears.

Five years ago there was no grange there. To-day there is a fine grange hall in a stately grove of oaks on land deeded

by Mr. Hinton for ninety-nine years. There is more than a hundred dollars in the treasury, and thousands could not buy the good-will, the warm-hearted loyalty of these people to one another. It was a good place to go, and one longed to linger in the beautiful place. One seldom meets a people so loyal to one another, so hopeful of their country, so in love with their grange. With them it is a glorious duty and responsibility to make the grange a success. They are talking of a juvenile grange, and they will make it a success, just as they make everything else they undertake a success.

"We may have hard times and lose enthusiasm," said several, "but our beloved grange can never die. It is planted too deep in the hearts and the lives of the people."

Woman's Corner

The executive committee of a state grange has charge of grange work during the interim between sessions. Why not elect a competent woman to serve on this committee, and thus look after the interests especially dear to woman's heart? She is missing an opportunity which she could well fill with service. A woman's work committee is good, but it lacks power.

Five thousand delegates coming from every state in the union and representing 500,000 women, met at the convention of Federated Women's Clubs, and discussed topics of interest to women—child labor, juvenile courts, household economics, pure-food laws, and schools. What a power for good the much ridiculed women's clubs have been. They have cleaned streets; insisted on, and helped pay for, better sanitary regulations, and cared for the unfortunate.

The grange has been the country woman's club, and will be more so as its possibilities for service unfold. In the opportunity for studying home economics it offers the field the woman of the city has found of such great value. Through intelligent management of the country home, including all that is meant by that term, the country will in the future, as the past, send out men and women who will become powers for good in whatever place they live. This means not only sanitary and scientific living for to-day, but the transmittal to children of strong bodies, tenanted by healthy, clear minds.

"Nothing is big enough nor interesting enough to make up to woman for the home. However far the advanced woman may wander, she finds herself constantly and of necessity reverting to the commonplace questions of food, clothing and shelter. Household economics enables the housekeeper to make an intelligent study of her work, showing that a knowledge of hygiene and sanitation, food values, decoration and the manifest interest of the home is a science to be studied and loved rather than a drudgery to be avoided."—Mary Moody Pugh.

Woman and science, what a splendid work they have wrought for mankind—science investigating, discovering, revealing; woman using the revelations of science for the benefit of humanity. She knows that to serve the interests of her loved ones the interests of others must be served. To give her children a healthful, moral, intellectual and physical environment, a like environment must be given to others.

It is the right of every child to go into the world equipped with a strong body, well-trained mind, strong moral foundations, and a reverence for truth, honor, integrity, and all that is the highest and best. It is his right to have some training that will enable him to get a living, culture that will bring the riches of all time to his door, and physical strength to enjoy. Every headache, every twinge in the back, every pain save that which comes from accidents, is a moral blame that some one must bear.

*Mary E. Lee*

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HAVING graduated from the Kentucky University, Roy Maynard mounted a gallant steed and leisurely rode through the fields and woodlands of the opulent "Blue-grass" toward his mountain home, where he expected to enjoy a quiet summer amid the scenes of his childhood, that fond recollection presented to view. Twenty years old, mild mannered and graceful, the ideal of the "preux chevalier" attaching itself indelibly to his character, he was the cynosure of the light that lies in woman's eyes, and highly esteemed by brave and honorable men—a cavalier such as inspired the minstrel's lay when knight-hood was in flower. In a mademoiselle's boudoir he would frame and sing "love ditties passing rare," or, if need be, he would "tilt in the tourney and win his lady there." In truth, this young Kentuckian, with soft voice, smooth face and brown curly hair, was in peace the zephyr of summer, in combat the mountain storm.

Riding from Lexington, the heart of the "Blue-grass," a "sweet rural scene, of flocks and green" lay before him. To the right and to the left fertile fields were spread in undulating beauty; through them ran pure, rippling streams, and here and there were flowers that gave the landscape a brilliant color. From the smooth, white turnpike road could be seen stately residences, the lathstrings, indicative of hospitality, hanging invitingly on the outside. Bordering the highway were the filmy plumes of hemp, the bloom on the alder, and the tassel on the corn. In the pastures were herds of contented cattle and groups of thoroughbred horses—the glories of Old Kentucky. Over all was a fair, blue sky.

Inspired by the beautiful scene and the carol of birds, young Maynard was indulging in dreamy, poetic fancies, when he was awakened to prosaic life by the stumbling of his steed and the ringing sound of a loosened shoe. Just ahead of him was a gem of a home within a setting of trees and pastures of blooming flowers, and, more attractive still, a fair girl, whose blue eyes were shaded by curls of gold stood at the gate. While the lone horseman was casting a wistful eye in the direction of the winsome maiden his steed cast off the loosened shoe. Maynard dismounted, picked up the shoe, approached the smiling girl, and with Chesterfieldian grace requested her to direct him to the nearest smithy.

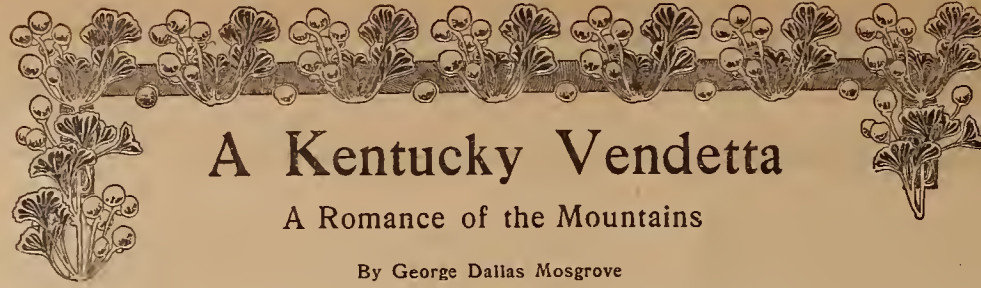
"You may have to await your turn. If you will come into the house, I will send Uncle Tom to the smithy with your horse."

Gladly accepting the invitation, the young man followed the fair charmer into Fernwood's drawing-room, where he tarried until the lengthening shadows indicated a late hour of the afternoon. Then thoughtful Uncle Tom appeared and courteously remarked: "I 'spect dat hoss is half-sole'd by dis time. If de young gemman say so, I'll go up dar an' see."

Dixie Raymond accompanied Roy to the gate, where he mingled his regrets at his necessary departure with expressions of his happiness in meeting her, hoping the parting was not forever, and declaring that his visit at Fernwood would be a pleasant memory. She having replied in kind, he mounted his horse and rode away—a lone cavalier dreaming love's young dream.

Leisurely pursuing his journey, the solitary horseman noted few changes of the landscape until he had gone a short distance beyond the affluent town of Richmond. Then the scene shifted somewhat suddenly—from the undulating fields of blue-grass to the narrow valleys in the shadows of rugged mountains, "rock-ribbed and ancient as the sun." Decorative flowers were few and far between. Here and there in crevices on the mountain slopes were rhododendrons, vivid patches of color near the sky-line.

Maynard was now in the mountains—the "Kentucky Appalachians"—a section inhabited by rough, untutored people who lived in isolation, with feudal customs. There were, however, exceptions, all the people not being primitive and untutored. Framed in by the everlasting hills were fertile gardens adorned with lilies-of-the-valley—beautiful homes occupied by people of wealth, culture and refinement. Such, for instance, was the native home of Roy Maynard. Owing to the fact that he had been almost continuously in the schools at Lexington, his acquaintance with the mountain section was limited. Of the "moonshiners" he knew very little, and, prior to his introduction to the reader, in 1880—fifteen years after the close of the Civil War—he had not affiliated with any clan in waging a vendetta warfare. His father and kinsmen, however, had been partisans, more or less active, on the Union side during the conflict between the North and the South, while not a few of their neighbors had arrayed themselves as partisans of the Confeder-



## A Kentucky Vendetta

A Romance of the Mountains

By George Dallas Mosgrove

acy. In fact, the mountain feuds generally were heritages of the Civil War.

Having journeyed the greater part of a day along a tortuous mountain road, Maynard, becoming weary, began with some anxiety to look for an inviting habitation where he could be accommodated with food and lodging for the night. He had passed by many "lone lodges in the wilderness," knocking at no door, until he realized that he was a benighted stranger in a strange land. Fortunately, however, he saw the gleam of a light dimly burning in the distance. With that as his guiding star he boldly rode to the short avenue leading to a house of somewhat pretentious architecture, the exterior, at least, being suggestive of Kentucky hospitality. Having dismounted and hitched his horse, he entered the yard and stepped upon the veranda. Then the unexpected happened. The voices he had heard, and the notes of ragtime music emanating from a decrepit accordeon, suddenly ceased, and when he advanced another step he heard a shuffling of feet, the swish of skirts and the slamming of a door. Having knocked at the front door without avail, no one stirring to extend a welcome, he walked around to a side porch and peered through an open window into the gloom of a deserted room. Just then the faint light

got; but I must give yo' a little advice. When yo' come to a house in these parts o' the Lord's vineyard, always stop at the gate an' holler, an' keep a-holler'n till somebody answers yo'. Never sneak into the yard an' go prowlin' round the house like a thief in the night. Just now we've got a feud on an' yo' come mighty close to gettin' shot. Now, don't forget what I tell yo'. Always stop at the gate an' holler, an' keep on a-holler'n till somebody comes out an' says yo' may come in. It's the only safe way, 'specially when there's a feud on."

The next morning when Roy was about to depart, his host, Luke Williams, warned him to be careful, as danger lurked in the bushes along the mountain pathways—there being "a feud on." Having promised that he would "holler at the gate" when he came that way again, Roy resumed his journey, thinking of Luke Williams' admonitions, of his yet distant home, and dreaming of Dixie Raymond, the girl left behind him at Fernwood.

\* \*

"Yet live there still who can remember well  
How, when a mountain chief his bugle  
blew,  
Both field and forest, dingle, cliff, and dell,  
And solitary heath, the signal knew."



"Roy . . . found Kivel and shot him dead with his revolver"

that had gleamed from the windows disappeared, making the strange quietude more impressive. Not even the bark of an honest or hostile watch-dog broke the solemn stillness. He went to the kitchen door, but heard no voice, no sound. Retracing his steps he again approached the front door, which was then slightly ajar. He could see a man and two boys in the hall, each presenting a shining gun. Then the man challenged him:

"Who be yo'? What yo' want?"  
"I'm a stranger seeking a night's lodg-  
ing."

"Why didn't yo' holler?"

"I don't know."

"What's yo' name?"

"Roy Maynard."

"What! Roy Maynard! Do you live at Hazeldean?"

"Yes; I'm on my way there now."

"Come right in. The Maynards of Hazeldean are welcome to anything I've

The Kentucky mountaineer, essentially a clansman, frequently becomes involved in an internecine warfare, or feud, which is long-enduring, and often hereditary.

A noted chieftain on the mountain war-path was Robert Graham, called by his clansmen "Cap'n Bob." When he was a mere boy he fought for the preservation of the Union, and as a lieutenant commanding a band of partisan rangers he had won local fame. His education was limited, and he had read very few books, among them being brief biographies of Daniel Boone and Francis Marion, the "Swamp Fox of the Carolinas." In a vendetta which was an outgrowth of the Civil War, his father and only brother had been shot and killed by an enemy in ambush, leaving him and his sister Blanche, now eighteen years old, the only survivors of a once happy family. In accordance with the mountain code he became a fierce avenger, relentless as the

Corsican. When this story opens, in 1880, he was thirty-five years old, and the chief of a clan engaged in almost constant warfare—a deadly feud. While his grievances were real, those of his clansmen were mainly relative, and, in some instances, mere figments of "minds diseased." The chief's personality, characterized by a slender, symmetrical body of medium height, small hands and feet, wavy black hair, dark flashing eyes, and smooth fair face was strikingly feminine and attractive. His manner and martial bearing, however, were far from suggesting effeminacy. His voice was strong, resonant and commanding, and his tread firm, resolute and graceful. In fancy I see him as

"With cautious step and ear awake,  
He climbs the crag and threads the brake."

Active and indefatigable in an adventure demanding courage, endurance and intelligence, he was naturally a leader of clannish mountaineers.

Five years after the close of the Civil War, Guy Kivel, twenty-two years old, came from his native home in the hills of East Tennessee to Hazeldean, the Maynard's home. He was a bright, handsome young fellow, but artful and treacherous. The vicissitudes of the Civil War had impoverished his family, Confederate adherents, who had left him poor but proud Gilbert Maynard, notably benevolent, gave him remunerative employment and otherwise aided him. He repaid the kindness of his benefactor by acts of base ingratitude, making it necessary for Mr. Maynard to discharge him. He had also paid court to his benefactor's daughter, Rosamond, who, while kind to him, discouraged his suit. Brooding over wrongs that were more fanciful than real, he planned to harass the Maynards and their friends the Grahams. Having contrived to make himself popular with a number of associates, and insidiously appealing to their prejudices against the more cultured and affluent Maynards, and to their baseless dislike of the Grahams, he became the leader of a band that started the bitterest feud ever known in that section of the "Kentucky Appalachians."

To the credit of the uncouth and untutored people of the mountains where feuds most flourish, let it be said that a thief among them is nearly as rare as the grape that grows on thistles. They will shoot to kill, but they will not rob their victim of purse or other thing of value.

\* \* \*

### A LODGE IN THE WILDERNESS

"A various scene the clansmen made,  
Some sat, some stood, some slowly strayed:  
But most with mantles folded round,  
Were crouched to rest upon the ground."

When an important campaign was to be planned, Graham by the well-known signals summoned his clansmen to a rendezvous in a cavern near the summit of a high mountain. The entrance to this subterranean retreat was about five feet high and three feet wide, the rendezvous being practically an impregnable stronghold. The only approaches, obscure and devious paths, were in front, and these pathways were guarded by trustworthy sentinels. Usually the assemblage was composed of ten or fifteen men, but on extraordinary occasions twenty-five or thirty clansmen, the whole band, met "Cap'n Bob" in the cavern—"a lodge of ample size, strange of structure and device."

Sometimes a member of the band who had been acting independently would drop in to report the success or failure of an attempt to avenge a wrong that concerned himself alone, and not infrequently an emissary came in to report some movement of the opposing clan.

Soon after nightfall of the day on which Roy Maynard had rode away from the home of Luke Williams, who had admonished him to "holler at the gate," Bill Jones, a ferocious bushwhacker of the swash-buckler style, entered the cavern and related with much satisfaction how he had killed his especial enemy, Lem Bolton, a dangerous man belonging to Kivel's band. The declaration that Bolton had been "removed" was good news, but Graham seemingly doubted the veracity of the braggadocio Jones:

"Bill, are you sure you killed Lem Bolton?"

"Sure, Cap'n! I know what I'm talkin' about. I got the drop on him, an' he keeled over an' never kicked. When I sighted him he was talkin' to a gay young fellow in the middle of the road. The boy was ridin' a fine hoss an' was inquiren' the way, he bein' lost. I was behind a clump of bushes whar I could not be seen, an' from thar I shot Lem dead in his tracks. I thought the young fellow would be skeered, but he didn't skeer worth a cent. Havin' no further business



thar, I just left Lem dead by the roadside, an' that game young fellow lookin' at the remains."

"How did Lem die, Bill?"  
 "How did he die! Why, Cap'n, he died with his boots on. That's how he died."  
 When preparing to depart, Bill nonchalantly remarked that he was going in quest of Sam Carter, another "bad man" whom he wanted to kill "with his boots on."

The swaggering Jones had no sooner withdrawn than an "outside guardian" admitted Uncle Dan, an old negro who had been a slave in the Graham home "befo' de wah," and, resolutely ignoring the emancipation proclamation, he still clung to "de ole plantation." Trustworthy and sagacious, he was "Marse Robert's," accredited emissary, going and coming at will. In short, Cap'n Bob and Uncle Dan worked together.

"Well," said Graham, "what brings you here, Uncle Dan? What do you want?"

"Well, Marse Robert, from what I've seen an' hern dem rapsallions dat b'longs to Kivel's ban' is plottin' to kill all o' you'uns what goes to town nex' court day. Dey will be on de roads an' in de town early in de mawnin', an' dey will shoot yo'-all from de bushes 'long de road, an' from de houses on de public square. I tells yo' now, yo' mus' be mighty keerful, fo' sho' dey will be watchin' fo' yo' whar yo' can't see 'em. I foun' out deir plans, an' den come right 'long to fetch yo' de news."

"Yes, Uncle Dan, I understand. When did you see Mr. Maynard and Miss Rosamond?"

"I d'clar, Marse Robert! I mos' fo'got to tell yo', an' de fac' is I've mos' 'fraid to tell yo', b'cause I knows yo'll be orful mad when yo' hears it. Some o' dat Kivel ban' has been treatin' Mr. Maynard an' Miss Rose outrageous, wus an' mo' ob it dan ebber befo', an', as yo' knows, dey is doin' dat b'cause yo' an' Mr. Maynard, an' Miss Rose is good friends, an' b'cause Kivel done foun' out long 'go dat Miss Rose likes yo' mo' dan she do him. He got pow'ful mad when he hearn yo' was settin' up with her las' Sunday night. Roy don't know nothin' 'bout dese doin's o' Kivel's ban', b'cause he nebber been tole nothin'. Dey is 'spectin' him home now, an' when he comes de debbil will be to pay, fo' dat boy won't stan' no sich doin's. Deed he won't!"

"You are right, Uncle Dan. Roy is a gallant youth. Well, you must go home. Blanche is alone. She may need you."

"I've goin', Marse Robert; but yo' need not be uneasy 'bout Miss Blanche. Dat chile ain't 'fraid o' nothin'. Kivel's whole ban' can't skeer her. Dey knows her, an' I tells yo' dey is 'fraid o' her. No, sah, none o' dat ban' is goin' to bodder Miss Blanche."

Robert Graham was uneasy. He knew that the crisis of his career was at hand. Uncle Dan had told him nothing new. From various sources he had learned of Kivel's plans. His reflections were somewhat as follows:

"This is Saturday. Monday will be county court day. Kivel, with all his faults is no coward. His band is as strong and courageous as mine. We are the same kind of people—revengeful mountaineers who know how to shoot. The conflict will be deadly, but it cannot be avoided. On Monday we must be ready to fight—preferably on the road, but in the town if we must. I wish Roy would come. I

need him. Luke Williams ought to be here. He is more than an hour late."

\* \* \* \* \*

BLANCHE

"What though no rule of courtly grace  
 To measured mood had trained her pace—  
 A foot more light, a step more true,  
 Ne'er from the heath-flower dashed the dew."

Blanche Graham, "sweet sixteen," was a spirited, lovely girl, whose personal charms did not exceed the purity of her heart—pure as the mountain air she breathed. A lily-of-the-valley paled in by lofty hills, she was apparently "a flower born to blush unseen, and waste its sweetness on the desert air." The sun had tinged her cheek with brown, the color of her hair and eyes. Untrammelled, she roamed through valley and over the hills, her song attuned to that of the choristers overhead in leafy bowers. Although "upon her speech there hung the accents of the mountain tongue," her voice was clear and musical. As faithful Uncle Dan has said, she knew no fear. Devoted to her brother, and fully conscious of the perils of his environment, she tactfully endeavored to dispel the forebodings of evil that not infrequently occupied his mind, knowing that his chief concern was for her comfort and safety. Her nerve being strong and her eye true, she had become an expert with pistol and rifle, a fact well known to Guy Kivel and every member of his band. Rosamond Maynard was her most intimate friend. Occasionally, during his brief visits home, she had roamed the hills with Roy, but her recollections of him were somewhat vague.

The Graham cottage, where Blanche's hand "had taught to twine the ivy and Idæan vine," was one mile from Hazeldean, between the latter and the clansmen's rendezvous on the mountain.

When Roy was viewing the remains of Lem Bolton, as reported by Bill Jones, he was overtaken by Luke Williams, who rode right up to the scene of the tragedy without stopping to "holler at the gate." Having related the circumstances of the killing, Roy suggested that Williams should assist him in conveying the body to a near-by log-cabin. To this humane proposition Williams was inclined to demur, but finally consented to aid in the removal of what he called the "carcass of a dog." At the cabin door a ten-year-old boy, Bolton's son, met them and said:

"Well, Luke, Pap's dead. They got the drop on him at last. I told him they'd git him."

Leaving the remains of the "bad man" with the apparently unlamenting family, Roy resumed his homeward way, Luke Williams accompanying him. They rode slowly while Williams recited in detail the story of the existing feud, the narration of the indignities suffered by his father and sister so enraging Roy that he declared that he would join Graham's band and kill Kivel or die in the attempt. He declined, however, to accompany his companion to the rendezvous, as he desired first to see the chief alone. Williams then suggested that by riding more rapidly he might reach Graham's home before his departure for the cavern. Having parted from the clansman, Roy was making good time when his attention was attracted to a maid sat on a log just ahead of him, but some distance from the road. Her chin rested upon her knees, held together

by her clasped hands, and her head and feet were bare. Ungallantly stopping where he could not be seen by the wood nymph, the horseman heard the following lament:

"Beauty is skin deep,  
 Ugly is to the bone;  
 Beauty fades away,  
 But ugly holds its own."

Duly sympathetic, but making no attempt to console the disconsolate maid, Roy spurred his horse to accelerative speed, the deepening shadows reminding him that "the shades of evening were coming slowly down." When he arrived at the Graham cottage all was quiet and shrouded in darkness, except the glimmer of a light from a side window. Neglecting to "holler at the gate," he dismounted and boldly walked to the open front door, where Blanche met him and smilingly extended a welcoming hand. Answering his inquiries, she told him that her brother was at the rendezvous; that Uncle Dan had been gone on a secret mission all day and was probably then at the cavern; that Mr. Maynard and Rosamond, whom she had visited that day, were well and expecting him home.

"Blanche, I must see Captain Graham. I must go to the rendezvous."

"Of course! What's to hinder? You have plenty of time. Robert will not leave the cavern before midnight. He has been wishing for you to come home. Yes, you must go to the rendezvous to-night."

"But I don't know the way, and the night is dark."

"I'll be your guide."  
 "You, Blanche?"

"Why not? I know the way, and I'm not afraid. In fact, I'd rather go than not. I shall enjoy the walk—nearly two miles."

Acting promptly, listening to no demur, Blanche gave him a rifle in addition to the revolver he carried, adjusted her own revolver to her belt and announced that they were ready.

Without serious mishap, owing to Blanche's familiarity with the mountain paths and her adroitness in avoiding lurking enemies, the young adventurers reached the cavern just as Uncle Dan was hesitatingly leaving it, and a few minutes before the arrival of Luke Williams, who had stopped on the way to "holler at the gate." The clansmen gladly admitted Roy to their council, and to Blanche they paid the homage due a lovely and trusted uncrowned queen. Having received final instructions, they one by one silently stole away—to meet again at a designated point, near the town, before the dawn of Monday morning. When, at midnight, Roy was about to depart from the Graham cottage the chief told him he would visit Hazeldean on the morrow.

\* \* \* \* \*

THE PASSING OF KIVEL

"On right, on left, above, below,  
 Spring up at once the lurking foe."

The members of the two clans lived mainly on the same side of the town, the only one in the county. On court days the little town, really nothing more than a village, was overflowing with people—men, women and children. The first Monday of each month, called "county court day," was almost invariably a red-letter day—characterized by a copious flow of red liquor and red blood. On this

day the mountaineer, carrying his indispensable rifle, went to the town very early in the morning, and, getting drunk, often remained until the next morning. In passing, I may remark that other men, living in more civilized communities, do likewise—get drunk, paint the town red, and stay till morning.

Just before the dawn of Monday, Graham's men were placed in ambush, Indian fashion, in an advantageous position nearly two miles from the town, at the convergence of the two roads that Kivel and his band would travel on their way to the town. Roy, in position near his chief, expectantly and impatiently awaited Kivel's coming. He had not long to wait. Not knowing that Graham had been advised of his intentions, Kivel started to the town unusually early in order to be prepared to give Graham's band the "warm reception" he had planned. Unconscious of imminent danger, he led his men in careless disarray into the ambushade.

Luke Williams fired the first shot, killing a man. Other shots followed, and others of Kivel's clansmen bit the dust. Instinctively, the survivors sought the shelter of bushes and trees to find the places of refuge occupied by their enemies. At close quarters the work was deadly, the numbers being nearly equal on each side. The battle was a succession of single combats, each rifleman taking unerring aim and firing at no uncertain mark. Roy shot at Kivel, but being out of practise, missed. As the battle progressed the confusion became less, the firing more deliberate. For more than an hour both sides fought steadfastly, and men fell dead. In the clangor and uproar of a general battle death is forgotten, and cowards often die like brave men; but in the cool and lingering expectation of death, only the man of true courage can stand. Such was the situation of the clansmen. No decided advantage had been gained, except that Kivel's men had been confused, and a few more of them had fallen in the beginning of the fight.

Roy, high-tempered, impetuous, and burning to kill Kivel had been restrained by Graham. Now he broke away from the presence of his chief, dashed across the road, found Kivel and shot him dead with his revolver. This daring act decided the fight. Without their leader, the Kivel band, or what remained of it, dispersed, leaving their dead in the hands of their inveterate foes. None was simply wounded. Every dead man had been shot through either the head or the heart. Sam Carter had shot Bill Jones—Bill dying "with his boots on." This fight ended the Graham-Kivel war, during which all civil law was ignored, and about twenty men were shot from ambush.

\* \* \* \* \*

THE OLD STORY

"Our lovers briefly he it said,  
 Wedded as lovers wont to wed,  
 When tale or play o'er;  
 Lived long and blessed, loved fond and true,  
 And saw a numerous race renew  
 The honors that they bore."

Robert Graham married gentle Rosamond Maynard, and Blanche "captured" a gallant young revenue officer who was hunting "moonshiners." Roy, once more "a lone horseman," rode to Fernwood, where he found Dixie Raymond waiting for him at the gate.

A Prospectus and a Prospect

"MERCY! what a racket!" thought Barbara, as she knocked. It kept on—clatter, clatter, bumpity-bump! Then a wail.

"Oh, children!" protested a deep masculine voice, in a tone of patient helplessness.

Barbara took advantage of the brief pause and knocked again. Suddenly the door opened, and she was confronted by a man with a tear-stained baby in his arms and a frown on his otherwise handsome face. The frown disappeared instantly, however, at sight of dainty, golden-haired Barbara.

"Good-morning," said Barbara, sweetly. "I am a book-agent, and would like a few minutes of your time if you can spare them."

There was a sudden gleam of humor in the dark eyes of the man towering above her. "Plenty of time, madam; I'm nurse-girl to-day. Come in."

He ushered her into a well-furnished but woefully untidy room and found her a chair. He still held the baby, while the other two children—a boy of six and a girl of four—ranged themselves alongside and stared at Barbara in frank wonder and admiration.

"Hands off, duckies; you will soil the lady's dress!" the man commanded, gently. And then, humorously, "They are as dirty as little pigs; can't keep 'em

clean. When it isn't sugar or molasses it's candy or mud pies. How do you women manage such things?"

Barbara laughed as she lovingly patted the two sticky little hands on her knee before the father forcibly removed the owners.

She was waxing eloquent over the merits of her book when a little curly head slipped up from beneath her arm, a winsome baby face smiled into hers, and a sweet baby voice cooed, admiringly, "Pitty lady, pittylady," patting her affectionately with his dirty little hand.

"Oh, Billy Boy!" came the horrified protest.

But with a merry laugh Barbara dropped her book and caught the bonnie two-year-old flatterer up in her arms, giving him a loving hug and a half dozen kisses, much to the delight of the child,



who returned them with fervor.

"I couldn't help it, the little darling!" she explained, smilingly, as she put him down gently, but in some confusion upon meeting a decidedly warm glance from a pair of dark eyes. Then, composedly, "Now to business again. Do you care to take the book?"

The man looked at her whimsically. "On one condition. I—" He paused in sudden confusion.

Barbara smiled. "You were saying—"

"That I'd take the book on one condition."

"And that is—"

"Providing the agent goes with it."

"Sir!" Barbara flushed crimson, and rose with dignity.

The mischievous look died out of his eyes as he said, earnestly, "Pardon me, but no offense is meant; I'm in earnest;

I need the woman more than the book. Everthing's been going to ruin ever since my wife died more than a year ago. My housekeeper has left, and my business is suffering for lack of attention. The children take to you, and I—I—well, I did, too, the moment you flashed on me like a gleam of sunshine. And—and—I mean it; I want to marry you, Miss—er—"

Barbara's dimples showed in appreciation of the situation.

"Barbara Allen, Mr.—er—"

"John Winthrop."

"You don't know anything about me—"

"Yes, I do; heard my grandmother sing your praises when I was a boy."

Then they both laughed.

"I've heard of you, too," said Barbara, demurely. "Early governor of Massachusetts colony, were you not?"

"I was; but governing a colony is nothing to governing three babies. I want to resign." Then, suggestively, "A book-agent has a hard time."

"Yes," with a sigh; "but it's the only thing I can do."

"Except to marry me," insinuatingly.

Then they laughed again.

"Will you, Miss—er— oh, hang it!"

He strode forward and took her hands in his. "Will you, Barbara?" softly.

"O-oo-oo, papa!" cooed a little voice;

"Billy Boy, 'tis pittylady, too-oo!"

Laura Alton Payne.





AUDITORIUM AND HALL OF CONGRESSES

## The Celebration of Jamestown's Third Centennial

By Willard B. Homan

**A**FTER three centuries of struggle crowned with undreamed-of prosperity, the American people have determined to take time next year to celebrate the beginnings of the nation at Jamestown, Virginia, in 1607. This celebration will be held on the shore of Hampton Roads, near Norfolk, Virginia, a few miles from the site of the old Jamestown settlement. The President of the United States has invited all the nations of the world to participate by sending detachments of their fleets and armies to the Jamestown Exposition. Seventeen of these nations have positively decided to participate; others have tentatively proposed to make a large showing of their marine and military strength at the exposition. The United States will put on parade at the head of the long line of mighty fighting ships the very finest of its new armor-clads.

It is not the intention of the management of the exposition to present to the public a vast accumulation of riches and products which will, at best, interest but a few professional people. They will rather strive after quality in all exhibits. Refinement in architecture and careful landscape gardening will make this one of the most notable of all expositions.

The exposition will open at noon, April 26th, 1907, and close at the same hour November 30th. The grounds have an

area of four hundred acres. Between the great piers of the exposition will be a water area of forty acres. On the landward side the grounds will be bounded by a floral fence of intertwined roses, trumpet vines, Virginia creeper and honeysuckle. Already the vines on this fence have nearly attained their full growth, and by next spring the fence will present to the eye a gorgeous blend of color.

In the center of the grounds rises the Auditorium and Hall of Congresses, crowned by a flattened dome in the Renaissance style. In front of this building, stretching down to the water for a thousand yards, is Raleigh Square.

At the foot of the square begin the two great piers of the exposition, which project northward into Hampton Roads for twenty-four hundred feet. They

are joined at their extremities by another pier, twelve hundred feet in length, running parallel with the shore. At the end of each pier a lighthouse will be erected,

which the government will use for its lighthouse exhibits. On each side of Raleigh Square, in front of the Auditorium and Hall of Congresses, two large exhibit buildings are now nearing completion. To the west is the Manufactures and Liberal Arts Building, two hundred and eighty by five hundred and fifty feet in dimensions. Facing it from the east side of the square is the Machinery and Transportation Building, of the same dimensions. Between these buildings and the water on each

side of the square are two smaller exhibit buildings. Along the water front on each side of the great piers are the state buildings, each of which will reproduce some

famous specimen of colonial architecture in the state it represents.

Behind the Auditorium and Hall of Congresses will be the great thirty-acre Lee Parade, on which fraternal orders, army and navy detachments and representatives of foreign nations will compete for honors. To the west of the Auditorium will be the military encampment, in which will be sheltered eleven thousand men of all armies.

Although it is the intention of the management to subordinate commercial features at the exposition to those of patriotic and historical import, the part which agriculture has played in producing the present prosperity of the country will have adequate representation. The exhibit will be made under the direction of James L. Farmer, who has had wide experience in this work. An important feature will be the exhibits made by the Southern railways, which will show specimens of the best agricultural methods, implements and products along the lines of their roads. A feature of the agricultural exhibit will be a series of meetings of societies of agricultural and horticultural character. These meetings will be held in a hall at one end of the States' Exhibit Building, and in a large hall provided for the purpose.

The agricultural and horticultural exhibit will be made in the States' Exhibit Building, to the rear and east of the



RUINS OF THE OLD CHURCH AT JAMESTOWN BUILT ABOUT 1610



BIRD'S-EYE VIEW OF JAMESTOWN EXPOSITION GROUNDS NEAR NORFOLK, VIRGINIA



Auditorium. In this edifice will be shown every style of agricultural implement. There will be examples of various systems of farming, plans and models of farm buildings, materials and appliances used in agricultural engineering, fertilizers and sewage. Lectures by distinguished scientists on the newest methods of agriculture, new discoveries of value to the farmer, and on useful insects and injurious insects, will be given from time to time in the halls of the Auditorium.

Coach-horses, draft-horses, trotting-horses and thoroughbreds will be exhibited. Cattle of the finest breeds will be shown. In addition to the general agricultural exhibit, special exhibits will be made of tobacco, cotton and peanuts, the special products of the South. An exhibit of the famous Connecticut shade-grown tobacco will be compared with the specimens of tobacco grown in other parts of the country.

In addition to the farm exhibits there will be a carefully selected display of mechanical appliances in the Manufactures and Liberal Arts Building, and a complete showing of transportation facilities of to-day and the past in the Transportation Building.

Not least of the many charms of the exposition site is the historic nature of the locality. Here, within a hundred and fifty miles of the spot on which the exposition will be held, have been enacted the most stirring episodes in the history of the United States. Sea fights between vessels of the United States and its enemies have occurred within sight of the exposition grounds. Directly opposite was fought the battle between the Monitor and the Merrimac, which changed the architecture of the navies of the world.

Not only will the architecture of the buildings appeal to all visitors for the comfort and homelike qualities it suggests, but there are also in the vicinity of Norfolk scores of houses which show the home architecture of the Colonial era at its best. In the central part of Norfolk, on Church Street, still stands St. Paul's Church, which has imbedded high up under its eaves a cannon-ball fired by the British fleet under Lord Dunmore, the last colonial governor. Near by, on the banks of the Potomac River, in Westmoreland County, is the spot where George Washington was born, and a little farther away is Mt. Vernon, the home of his later years, where he died. At Brandon, Prince George County, on the banks of the James River, within a few miles of the original site of Jamestown, is the ancestral home of the Harrison family, which has given one governor to Virginia, and two presidents to the United States. Every county in the vicinity of Norfolk has many historical homes. Norfolk itself has a large number of families descended from men and women famous in the history of this country, living today in the same houses their forefathers occupied.

The Colonial style will prevail without exception at the Jamestown Exposition. The state buildings will each be a reproduction of a famous home or public edifice in the state whose name it bears. Pennsylvania will reproduce Independence Hall, and probably the old Liberty Bell will be a part of that state's exhibit. New Jersey will reproduce Washington's headquarters at Morristown; Ohio will copy "Adena," the home of former Governor Worthington, of that state; Maryland will reproduce the old Senate House at Annapolis, in which Washington relinquished his commission as commander of the Continental Armies at the end of the Revolution.

Off the shore on which these buildings are now being erected will float the greatest naval pageant the world has ever seen. Seventeen or more of the great nations will send vessels of their fleets to participate in the Jamestown Exposition. This list includes Great Britain, Germany, Russia, France, Japan, Switzerland, Italy, Cuba, Venezuela, Mexico, Costa Rica, Haiti, Belgium, Guatemala, Argentine Republic, Dominican Republic and Denmark.

Nations which have no navy will send a military contingent or a civil delegation. It is estimated by competent military officers that the detachment of troops from the armies of the world will aggregate at no time less than eleven thousand men.

Situated in the heart of the most historic region of America, beside the most famous waterway of the New World, recalling at every turn the most glorious pages of American history, the Jamestown Ter-Centennial Exposition cannot fail to be the occasion of the most tremendous outpouring of patriotic enthusiasm the world has seen in years.



## The Harvest Dance

By Morris Meredith

I AM not sure as to just how it is on the farms in these days of innovations of all kinds in our American customs, but I know that when I was a boy or a young man on a farm in the West, we always celebrated the close of the harvesting with a dance. In those days the thrashers went from farm to farm with their big, clumsy, and somewhat crude, thrashing-machines to thrash out the wheat, and it was a hustling day on the farm. I remember that the farmers' wives were apt to empty the straw in their bed-ticks on that day, and refill them with the new, clean and sweet-smelling straw that came from the thrashing of the grain.

But about that harvest dance. The way we young fellows did "hoe it down" was a caution. The long day of hard work seemed to have left no weariness in our strong young bodies, and twelve o'clock at night found us still "swinging our pardners" and cutting "pigeon-wings" in the big barn to the tune of "Turkey in the Straw" or "Old Dan Tucker," or

Granny will your dog bite?  
No, child; no!

With what alacrity we responded to the loud cry of the "caller" to "choose pardners for a quadrille," and while we did it the fiddlers "tuned up," scraping their bows across the tense catgut, and drawing forth squeaking but delightful sounds that made the pulses of the dancers beat a little faster.

The old folks and all who were not going to dance took seats on benches or chairs ranged against the barn walls, and we young people were eager for the caller's cry of,

"All set a-standing!"

Then the fiddlers would give us good old "High-Jenny, Low-Jenny," or

Buffalo girls, are you coming out to-night  
To dance by the light of the moon?

"The Arkansas Traveler" and "Speed the Plow" were sure to be played at some time during the progress of the dance, and "The Devil's Dream" and "Money Musk" were surely great favorites.

The caller was sure to be someone with good, strong lungs, and his voice would rise high above any number of fiddles and the noise made by any number of dancers when he called out,

"Swing yer pardners!"

"Lady to the right and gent follow after!"

"Lady in the center and four hands 'round, four hands 'round, four hands 'round!"

"All swing!"

"Cage the queen!"

"Alaman left!"

"Swing your honey and grand right and left!"

"Lady to the right and gent doe see doe!"

"Cheat or swing!"

"Lady in the center and seven hands 'round!"

"Balance all!"

"Lady to the right and gent to the left!"

"All cross over!"

"Promenade all to your seats!"

Then another "set" would be formed, or there would be a little round-dancing, although this form of dancing was less popular than the quadrille, and "fancy" dancing was never attempted, unless one could give that name to some of the "double shuffles" executed by some of the young fellows, while others were crooking their elbows before the country belles and saying,

"May I have the honor of dancing the next set with you?"

The printed dance program was never heard of at a harvest dance, and the formalities of the city ball were dispensed with. There was no standing on ceremony or putting on of airs, but there was a heartiness and jollity that precluded the possibility of anyone feeling awkward or constrained. The young fellows danced with tremendous vigor, slapping the floor with the soles of their good stout shoes, and executing some steps never seen except at a country dance. The "Ri tum a tiddy I tiddy I dee" of the fiddlers caused even the old folks to keep time softly with nodding heads or with their feet as they sat and looked at the young folks. There was much of merry badinage and shouts of laughter when some buxom belle "cheated" when her partner sought to

"swing" her, and sometimes all of the four girls in the "set" would "cheat" at the same time and "swing" each other. This was regarded as a very clever way of bringing discomfiture to the four young fellows, who were apt to "get even" so far as they could by swinging each other. Sometimes a belle affecting indignation would give her partner a resounding slap on his tanned cheek when he sought to obey the caller's command to "Swing yer pardner—with a kiss!"

I remember that there was one kind of a dance in which all who would formed in a circle and danced around and around with folded arms and without partners until the caller bawled forth the order for them to "snatch pardners," when there would be a perfect hurly-burly. Having paired off in this hustling way, jolly quadrilles would be formed and it would be "on with the dance" and joy was "unconfined."

Along toward midnight all would be seated and supper would be "passed." Pyramids of pies and pans of good fat "twister" doughnuts, and thick, soft, seed cookies would be passed. There would be generous squares of gingerbread, and great wedges of election or lady cake. Sometimes there were gooseberry tarts, and the coffee-cups were not of the "after-dinner" variety now in use, for they held a good half pint, and one was free to have them replenished several times if one cared to do so. There was a great abundance of everything, and it was regarded as uncomplimentary to the cook not to "eat hearty." A bushel basket of big, red-cheeked apples was apt to make its appearance, and when it had been placed in the middle of the floor we were told to "help ourselves."

Sometimes it happened that a young fellow with an overabundance of animal spirits would kick the basket over and send the apples rolling to all parts of the barn, and there would be a great grabbing and squabbling for them. The young fellows were pretty sure to come to the dance with a supply of gum-drops or candy lozenges and hearts in their pockets, on which there would be printed in pink letters such entrancing and amorous sentiments as,

"I love you."

"You are my darling."

"Will you be mine?"

And when a smitten swain slipped into the hand of a maiden a "lozenger" with the words "I adore you" on it, he would sometimes get one in return bearing the words that very often hurt—"You are a simpleton."

A neat "light calico" or a beflounced one of pink was regarded as good enough for any dance or other social function, and the young fellows wore white paper collars with their "hickory" or checked gingham shirts. Their homemade trousers were tucked into their stout stogy boots, and they gave forth an aroma of cinnamon drops or scented hair-oil as they whirled around and around in the merry dance. Sometimes a gay silk handkerchief took the place of a collar around the neck, and if the heat became oppressive and a dancer felt inclined to discard his coat there was no bothersome rule of etiquette extant to bring carping criticism upon him because he had violated the proprieties.

And finally there came the breaking up of the dance and the "May I see you home?" appeals of the young fellows to the blushing girls, some of whom were inconsiderate enough to "mitten" a fellow right before the delighted lookers-on, some of whom would be apt to cry out with a sad lack of feeling and to the great discomfiture of the poor fellow,

"Hi! Jack got the mitten! Try somewhere else, Jack, and mebbe you'll have a pair!"

It was all far removed from the "good form" observances of the present time in some localities, but it was entirely innocent and harmless, and it was more agreeable than the insincerity and affectation of some of the "good-form" canons to which we are now expected to adhere so tenaciously.

The old-time harvest dance under the soft light of the harvest moon gave an innocent pleasure to thousands, and no doubt it is still observed in some localities in which the people are still wise enough to believe that the best elements of human happiness are founded on genuine kindness of feeling and a total lack of ostentation or affectation.

### Hetty Green's Philosophy

MRS. HETTY GREEN, who must now share the title of "the richest woman in the world" with Mrs. Russell Sage, places no trust, financial or other, in anyone until he has earned it. Her philosophy of life is seemingly based on common sense. She believes in peace, and a standing army to maintain it. Some of her quaint sayings follow:

I would advise a person to invest only in the other world.

I look upon property largely as a trust. I take care of it much on the same principle that you would take care of a valuable animal were it left in your charge. My father had the idea that the money one inherited should be given over undiminished to the next generation. That is the way I have felt.

I don't know that my fortune is due to any fixed principles. I only use common sense.

There is no place in the world where women can be persecuted as here. America's heiresses have a worse time than the Indian widows.

The trouble with most persons is that they want to spend, but they don't want to work.

Learn how to manage your brains and you will know how to manage your fortune. Intelligence is better than Greek and Latin, and good morals will stand by you better than a fine education.

I am afraid of two things—lightning and religious lawyers.

I am a Quaker and I believe in peace, and my way is to preserve peace just by being ready, like a standing army.

Divorce is the saddest thing.

The women never learn anything about housekeeping, and instead of attending to household matters after marriage they are without interest in them. They prink up and parade around and then men drink up and parade around and trouble follows.

The young folks of to-day have not inherited common sense.

Autos, like the giving of tips, are extravagant things. They chug, chug along, wasting money, destroying nerves, breaking down and smashing property. They kick more than mules do.

Mrs. Green has watched the discussion over the Sage will with much interest.

◆

### In the Swimmin' Pool

There are some scenes of boyhood days we never quite forget,  
Amid the years that are no more they sweetly linger yet;  
And I can hear the splashing, and the laughter and the shout  
Whene'er we threw each other in or chased each other out;  
I wonder what the fishes thought to see our half-a-score  
Plunge boldly from the mossy rise that formed the brooklet's shore;  
We often missed the clanging bell that summoned us to school,  
For a paradise of truants was the ole swimmin' pool.

The creek is singing soft to-day as in the years ago,  
Its ripples catch the golden gleam of summer's earliest dawn,  
And to the same all-cherished place the boys still go to swim,  
And there's a "Jack," and there's a "Joe," and there are "Tom" and "Jim;"  
I slip across the meadow and I slip upon the crowd,  
And vanished years come back whene'er I hear the laughter loud;  
Till I long to plunge among them in the waters clear and cool  
That invest with hallowed memories the ole swimmin' pool.

I can almost hear the music of the old creek's ebb and flow,  
I can see the sunny ripples as I saw them long ago,  
Aye, and hear the joyous laughter of the boys who used to swim  
Where the oakn branches quivered in the even, cool and dim;  
Childhood's pleasures never vanish, youth is like a happy rhyme,  
And the boys are boys forever in the dear old summer-time;  
Ah! how oft we swapped the hours when we should have been at school  
For the mad, infectious pleasure of the ole swimmin' pool.

How inviting were the waters, and the old creek seemed to say;  
"I am waiting, come and try me; this is not your study day."  
We never could resist the call, for boys are boys, you know,  
The same to-day as when I was a youngster long ago;  
Among the limpid waters every sorrow flew away,  
And life appeared a great recess the live-long summer day;  
How oft we sat and dried our hair amid the shadows cool,  
Lest mother should suspect we'd wooed the ole swimmin' pool.

—T. C. Harbaugh in "The Rural Magazine."



## Tomato Sweets

**T**OMATOES make very delicious sweets and help to vary the monotony of winter fruits very delightfully. All of the following recipes are excellent.

**TOMATO JAM**—Select firm ripe tomatoes, throw them into boiling water for a minute, slip off their skins, and cook in a preserving-kettle until perfectly soft. Cook slowly without adding water. Rub them through a sieve with a wooden spoon, weigh the pulp, and for each pound allow one pound of best granulated sugar, two very thinly sliced lemons and a small piece of ginger root. Put all the ingredients into the preserving-kettle, and boil quickly until the jam looks clear. It must be watched and stirred frequently to prevent scorching. Put in dry jars and seal when cold.

**TOMATO MARMALADE**—For each pound of skinned tomatoes allow one pound of granulated sugar and the juice and grated rind of one lemon. Mix all together and let stand over night. This is better to be made in small quantities at a time, using not over two or three pounds of tomatoes at one cooking. In the morning boil slowly, with almost constant stirring, until it is a smooth, thick mass. Skim as required, and seal in glasses or marmalade pots.

**PRESERVED TOMATOES**—Select handsome yellow plum-shaped tomatoes for preserves, neither too large nor too ripe. Scald and skin carefully, weigh, and allow one pound of sugar for each pound of tomatoes. Place in layers in a stone jar and let stand over night. In the morning carefully pour off the juice and boil it to a thick syrup. Add the tomatoes, two or three thinly sliced, chopped lemons and a small piece of green ginger root, and simmer very gently until the fruit is clear and the syrup very rich. Seal.

**TOMATO SWEET PICKLES**—If green tomatoes are used slice them very thin. To four pounds allow one pint of vinegar, three pounds of granulated sugar, and one ounce each of cloves and stick cinnamon tied in a piece of muslin. Make a syrup with the sugar, vinegar and spices, cooking it until very thick and rich. Add the tomatoes, and let them boil gently until tender. When done, seal. To pickle ripe tomatoes use the same proportions of vinegar, sugar and spices, and leave the fruit whole.

**TOMATO SWEETMEATS**—Scald and skin the yellow plum tomatoes, and add half the weight in brown sugar. Cook slowly, without adding any water, until the sugar penetrates the fruit and it looks clear and rich. Lift out, spread on flat dishes, and dry in the sun, covering with mosquito-netting to keep away flies and other insects. Sprinkle over a little of the syrup from time to time while drying. Pack in jars with layers of powdered sugar between, and cover tightly. These are an excellent substitute for figs. **MARY FOSTER SNIDER.**

## Old Cornice-Fashion Back

**"N**EVER throw anything away," was the advice of a decorator to a New York "Sun" reporter. "However ugly it may be, there is a practical certainty that it will come into style again. It would not surprise me to see in a few years that black walnut was again in demand, hideous as we thought it at one time. A fashion needs only a certain period of repose to come into vogue. The black walnut will be due after a while."

These observations were made in the course of a conversation about the renewed favor of cornices.

Twenty years ago a cornice filled with horror persons who followed fashion in furniture. Cornices were popular long before the Victorian period, though they are commonly called a Victorian ornament. It was during the second half of the last century that they were discarded as not being in keeping with modern taste, and curtains began to be hung directly from the brass or wooden poles which are still in use.

The returning favor of the cornice showed itself first last winter. A new hotel which is supposed to represent the last word in tasteful and unostentatious decoration had all its rooms supplied with cornices made of the same cloth as the window curtains.

This form of cornice became very popular last winter. Even more admired are the old-fashioned brass-and-gilt cornices of Colonial days.

The originals are to-day so rare as to be almost unattainable, so reproductions are manufactured which show every style in this old mode.

For the great houses, the cornices and lambrequins are made of stuffs draped in the elaborate fashion shown in the



## The Housewife



picture of a boudoir in one of the Long Island palaces. These cornices are especially effective in country-houses, when the curtains under them are of chintz, or some fashion of the period in which these cornices were used.

It is not necessary to draw back the curtains, although this was undoubtedly the custom when these cornices were the fashion, as the use of the curtain-holders show. These are also manufactured now to go with the curtains.

They were as common as the cornices at one time, but, like them, went the way of all such decorations.

Under the chintz or stuff curtains the sash curtains are also used with the cornices.

Sometimes the lambrequin is edged with gimp of the same shade as the cloth,



FANCY COLLAR

but that should never be of a contrasting tint, as the curtains are meant to be very simple. Frequently the lambrequin is not edged at all, nor are the sides of the curtain finished with a gimp. Naturally, such simple curtains are usually made of cotton or cotton and silk, as the design is not suited to a costly material.

For bedrooms the brass-and-gilt cornices may be used without sash curtains, and simply with the white cotton or muslin curtain falling directly from the cornice. This is especially pretty when the white muslin curtains are ornamented with a ruffle at the edges. This ruffle should not be less than three inches deep.

In this case, it is better to go contrary to the old traditions of the cornice and let the curtains fall straight, not drawing them back, but making them serve also for sash curtains. For heavy curtains that are to be drawn back there is a brass prong which is modeled directly on the old-fashioned pieces once thought a necessary part of all window equipment.

## Armllets

To obviate the tendency of the short sleeve to slip down on the arm, the armllet or garter of elastic, covered with colored ribbon has become quite popular. White, black, Dresden or plain colored ribbon is used. They should match the belt.

Cut one-inch-wide elastic a length to circle the arm where you wish the sleeve to remain. Stitch by machine a distance

from the edge on both sides ribbon enough wider than the elastic to allow a narrow frill on each edge when the ribbon is pulled over the elastic. Join and ornament with a rosette of the ribbon. They add very much to the dressy appearance of a white suit, giving an air of jauntiness to the wearer. **M. E.**

## Pillow Fillings

**T**HESSE are the days when the forehanded pillow-maker fares forth with basket and bag to lay in a supply of fillings for the ensuing year. For downy lightness nothing can excel the silk from the milkweed pods, and as these burst open when fully ripe, they should be gathered before Jack Frost has a chance to harvest them. Packed away closely, so they do not have room to expand in bursting, the removal of the silk may be left for the winter's leisure, and when quite dry the brown seeds are easily brushed off as the pod is opened.

A little less fluffy, but perhaps as well favored, because of their greater abundance and rapidity of preparation, are the cat-tail heads. Gathered when fully ripe, a rub between the palms of the hands is all that is needed, and many persons make use of them, not only for filling sofa-pillows, but for use on the beds as well, considering them more sanitary than feathers, and they certainly afford an excellent and inexpensive substitute if feathers are scarce.

Anyone who has ever enjoyed the aromatic fragrance of a hop pillow will not let the opportunity pass of gathering enough hops for at least one pillow; they grow wild in so many localities.

There is nothing nicer in the way of pillow fillings than the dried heads of sweet clover, made doubly attractive when encased in a pale-green linen cover embroidered or outlined with clover



ARMLETS

leaves and blossoms. Retaining their fragrance when dried, they are a very pleasant reminder of summer on a bleak winter day.

The much-prized balsam pillows are not so easily obtained by those living outside the region of evergreens, yet there is a source of supply almost universally overlooked, and that is in the Christmas trees. Don't let the next Christmas tree in home, schoolhouse or church be thrown out when it has served its purpose, but "speak" for it early and provide yourself with a balsam pillow—and with it the envy of others less thoughtful. **A. B.**

## Brass Jardiniere

**T**HE most up-to-date jardiniere is made from an old brass or copper kettle, the kind our grandmothers used and have discarded. The older and more battered up, the better and more effective they are. Stand it in strong lye-water over night. (That softens the black of many years standing.) Then take equal parts of salt and vinegar and rub the kettle, using a soft cloth. After it has been well cleaned, rub and polish with a woolen cloth until it is bright. Then place on a table or stand and set a fern or some pretty plant in it, and you have not only a pretty, but an elegant ornament. **M. E. W.**

## Porch-Box

**A** VERY pretty and effective porch-box is made by taking a medium-sized cheese-box, place it on the porch where you want it to remain, fill with good, rich soil, and then add your vines and plants as full as you like. When all finished, cover the box with bark from the trees (that from a living tree is best), tack it on the box by placing it up and down and making it very uneven at both the top and bottom, and you have a most artistic box for flowers. **M. E. W.**

## Fancy Collar

**T**HE rage for the Peter Pan waist has called forth a variety of fancy collars in that style. A very simple, pretty one is here shown, with a dainty scalloped edge, with small eyelets and a leaf design worked in D. M. C. floss on white linen. The waist may be of plain white linen, with fancy collar and cuffs. **M. E. S.**

## Hyacinths in Winter

**T**HERE is nothing else in the floral kingdom that will give one as much pleasure, that can be grown with as much ease, or that is so sure to bloom as the hyacinth. Let those who try to worry along with the greenhouse plants in the ordinary window-garden try a few hyacinth bulbs, and they will surely obtain a great deal of pleasure from them. The first requirement is good, sound bulbs. I prefer the named Dutch hyacinths, and know just what to expect from them.

I pot my hyacinths from September until Christmas, and have a succession of bloom during the latter part of the winter and early spring months. I pot bulbs in pots or boxes from six to eight inches in depth, in rich earth composed of leaf-mold, sand and common garden-soil. I always hollow out a space for the bulb and then cover; if the bulb is pressed into the soil, the roots will raise it above the surface. After potting, water sparingly and set away in the dark.

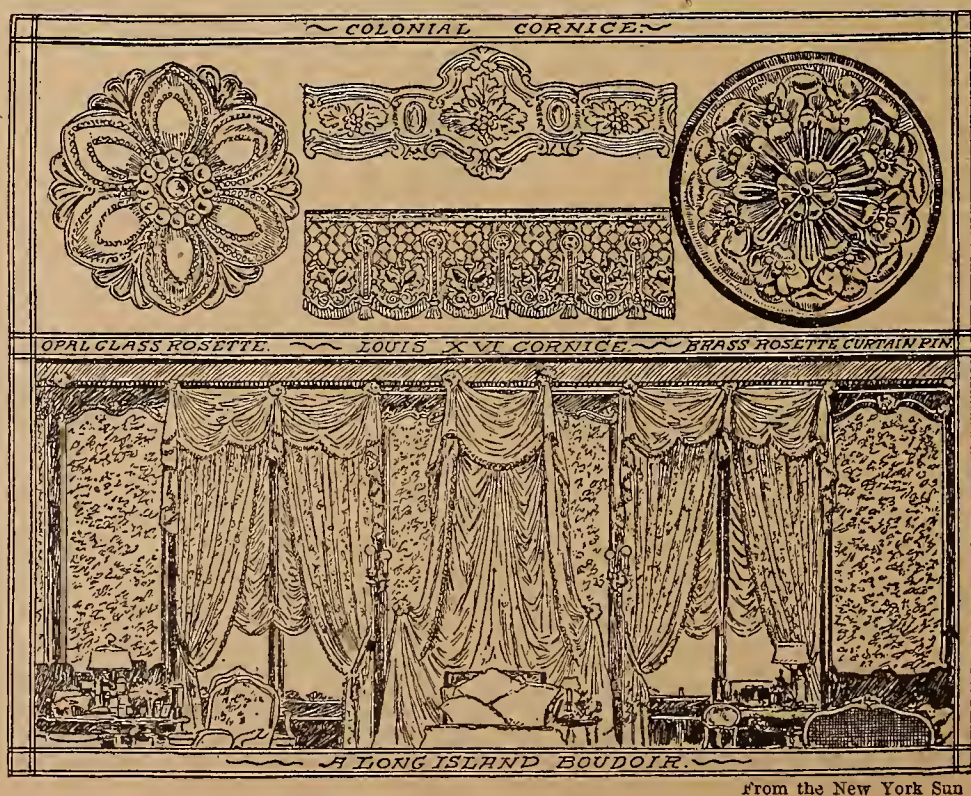
When well rooted gradually bring to the light, warmth and sunshine. Sunlight and warmth are very essential to the development of the flowers, but after they are fully developed, if placed in a north window, or out of the direct rays of the sun, they will remain perfect for two weeks; sometimes longer if in a very cool atmosphere. The hyacinth will stand a lower temperature than almost any other flower. I have had them to freeze and still the flower-stalks would be perfectly developed.

For house-culture I prefer the single hyacinths, as the bells are more perfectly developed than the double sorts.

Always plant harmonizing colors together. The blues, yellows and pinks are all beautiful by themselves, but lose half of their beauty when planted together. No shade loses any of its brilliant coloring by being planted next to the white. The sweet little Roman hyacinth will bloom earlier than the Dutch sorts. The feathery bells of the white Roman are not very showy, but are as beautiful and sweet as they can be. In growing the Dutch hyacinths the bells often open down in the foliage. To prevent this put a dark paper cover over them so as to exclude all light, except the small opening at the top, and in trying to reach the light they will come out with perfectly developed stalks.

In planting my own hyacinths I always have one long box to fit the window-sill, and plant eight or a dozen bulbs in this, using different shades of blue with white. When I have mixed bulbs, each bulb is given a pot by itself, then there is no clashing of uncongenial colors. If the soil is not rich I give liquid fertilizers twice a week until the flowers are developed. I grow large, perfect stalks of this popular flower without a south window—which is considered a necessary adjunct in its cultivation. I manage with east and west windows, moving twice a day to give all the sunlight possible. I have had them develop perfectly in a north window, but this is very slow.

**LAURA JONES.**



From the New York Sun



**Heroines of the Revolution**  
[CONTINUED FROM LAST ISSUE]

ONE of the patriotic efforts of the women of Fishing Creek neighborhood is worth remembrance. The rich lands were well adapted for the growth of wheat, which was extensively cultivated by the "Pennsylvania Irish" settlers. The harvest was in June; but all the men able to bear arms having taken to the field, none remained to secure the crop on which the support of their families depended:

The young women, who with spirit equal to that of their gallant brothers, formed a company of reapers for cutting and garnering the grain. They went day after day from one farm to another, and reaped the crop with the assistance of the matrons and a few old men. The only question they asked was, "Is the owner out with the fighting men?" and an affirmative answer was sufficient to engage them at once in the labor. It was no small undertaking, five or six weeks of unceasing toil being necessary to gather in the harvest through the country. It seemed that Providence smiled on the generous enterprise; there were no storms during that period to ravage the fields, and it was related for years afterward as very remarkable, that some of the crops of 1780 were secured several weeks after the grain was fully ripe.

Anne Elliott, "the beautiful rebel," the wearer of the thirteen plumes, had a brave heart and ready tongue.

At one time, when Col. Lewis Morris was visiting at Accabec, the country seat of the Elliotts, the attention of the family was drawn to the windows by an unusual noise, and they perceived that the house was surrounded by the Black Dragoons, in search of the young officer, who had no time to escape. Miss Elliott went to one of the windows, opened it, and presenting herself to the view of the dragoons, demanded what they wanted. "We want the rebel!" was the reply. "Go and look for him in the American army!" answered the young girl. "How dare you disturb a family under the protection of both armies?" Her firmness and resolution conquered, and the enemy departed without further molestation. The marriage of Colonel Lewis and the dauntless Anne was one of the romantic happenings that brightened even the records of war.

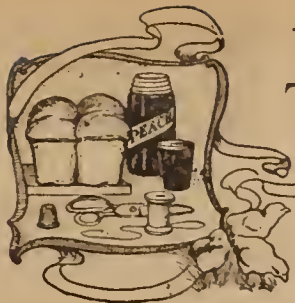
An interesting anecdote is told of General Greene's experience of the devotion and patriotism of the keeper of the hotel at Salisbury.

His aids having been despatched to different parts of the retreating army, the general rode on with a heavy heart to Salisbury. It had been raining during the day, and his soaked and soiled garments and appearance of exhaustion as he wearily dismounted from his jaded horse at the door of the principal hotel, showed that he had suffered much from exposure to the storm, fatigue, and harassing anxiety. Doctor Reed, who had charge of the sick and wounded prisoners, was engaged in writing paroles for such of the officers as could not go on. From his apartment overlooking the main street he saw his friend, unaccompanied by his aides, ride up and alight, and hastened to receive him as he entered the house. Startled by his dispirited looks, he could not refrain from noticing them, made anxious inquiries, to which the wearied soldier replied: "Yes—fatigued—hungry—alone, and penniless!"

The melancholy reply was heard by one determined to prove, by the generous assistance proffered in time of need, that no reverse could dim the flame of disinterested patriotism. General Greene had hardly taken his seat at the well-spread table when Mrs. Steele, the landlady of the hotel, entered the room, and carefully closed the door behind her. Approaching her distinguished guest, she reminded him of the despondent words he had uttered, implying, as she thought, a distrust of the devotion of his friends, through every calamity, to the cause. Money, too, she declared he should have, and drew from under her apron two small bags full of specie, probably the earnings of years. "Take these," said she, "for you will want them, and I can do without them."

"She has seven sons in the rebel army," said an English officer by way of excuse for permitting the plundering of the farm and the burning of the house owned by the Widow Brevard. Another mother, when asked how many sons she had, answered eight, and added proudly, "Seven of them are engaged in the service of their country." "Really, madam," said the officer, sneeringly, "you have enough of them." "No, sir," said the matron proudly, "I wish I had fifty."

Lord Rawdon, importuned by the valiant Mrs. McCalla for permission to see her husband, brutally declared that he "would rather hang such rebels than eat



**The Housewife**



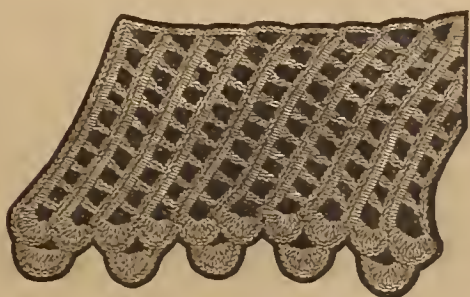
his breakfast," but finally gave grudging consent to an interview. "She can cry, and she can fight, too," he declared to Major Doyle. "Did you see the look she gave me Major, such a woman might do harm; she must not be permitted to pass and repass, unless some one of the officers is with her, and she must stay only ten minutes, and it must be in your presence." In her ten minutes' grace Mrs. McCalla informed herself as to the needs of the prisoners, and, returning home, she immediately took measures for their relief, to such effect that within a short time she set out again for Camden, with a neighbor, and each woman drove before her a pack-horse with provisions and clothing.

[TO BE CONTINUED NEXT ISSUE]

**Bias Edging in Crochet**

CHAIN 33. First row; a tr in 9th st from hook. \* ch 2, miss 2, a tr in next, repeat from \* 7 times.

Second row; ch 1, a dc on first tr, then a dc in each of the next 27 st; the last



BIAS EDGING IN CROCHET

three stitches will come in the loop at end.

Third row; ch 8, a tr in last dc made in previous row; this increases one space and is done to make the lace bias. \* ch 2, miss 2, tr in next, repeat from \* 7 times. This decreases one space.

Repeat second and third rows until you have the length wanted. End the lace at the side where the eight chain-loops are. There must be an equal number of those loops to make the scallops come out right. Make the scallops thus:—Work 1 dc, 5 tr, 1 dc under end loop, then make 1 dc, 2 tr under next loop, ch 5, turn back and fasten in center of first scallop, work 1 dc, 5 tr, 1 dc under ch 5, then make 3 tr, 1 dc in the half-filled loop below. Fill next or third loop like the first one. So work along, making scallops to the end. Crochet a chain along the upper edge, making four chains between all the little points and a single crochet in each point.

This lace is easily and rapidly worked, and can be made wider or narrower than the illustrated sample.

MRS. J. R. MACKINTOSH.

**The Uses of Stale Bread**

A COVERED stone jar filled with bread-crumbs is indispensable to a well-appointed pantry. Many housekeepers buy cracker dust for cooking purposes, but carefully dried bits of bread will be found much more appetizing. There is no necessity for ever wasting a crumb of bread, because it never gets so dry as to be unpalatable unless carelessly left to get musty.

If scraps of bread are left, cut them into inch squares, put them into an oven and toast very brown, then put away in a glass jar. If in a dry place the cubes will keep an indefinite time. They are delicious in thin soups, and nothing nicer can be found to serve with a small roast than toasted cubes softened with rich gravy. The crumbs left from the cutting of the cubes should be dried thoroughly, then put on the bread-board and rolled to powder or pounded in a pestle. Put the crumbs in a jar to use for breaded chops, oysters, meat "stuffing," and any of the hundred little economies into which bread enters quite as palatably as cracker crumbs.

A delicious supper for little children is made of toasted bread. Toast the scraps very brown and pound into small bits. A tablespoonful or two in a glass of milk makes a light, nutritious lunch, and it will keep for weeks. If the bottled crumbs happen to gather damp, pour into a pan and set in a hot oven for a moment or two.

When slices of neatly cut bread are left from a meal, pile them up until you get enough for a dish of toast. There are three ways of serving it. If the bread is quite fresh when toasted, it may be lightly browned and served dry. If the bread is pretty hard, toast it brown. Have on the back of the stove a deep dish with two heaping tablespoonfuls of butter to a cupful of boiling water and a little salt. Dip the toast quickly in and out of this and serve on a hot dish. For another kind of dip toast, boil a pint of milk, season it with a tablespoonful of butter, salt and a very little pepper, and thicken slightly with flour, let it boil up once; dip the toast in a dish of plain hot milk, put in a deep hot dish and pour the thickened milk over it.

If you get tired of toast, steam the dry bread. Put over the fire a skillet of water, and when it comes to a boil set over it a tin steamer. Into this steamer put slices of bread, cold baking-powder biscuits or cold light dough biscuits. Pile the steamer full, if you like, and lay over the bread a perfectly clean cloth, then put on the lid and let the thing steam for ten minutes. If the bread is very dry it may take longer. Steamed bread should be served a piece at a time, for it dries very quickly, and is a delicious morsel when eaten piping hot.

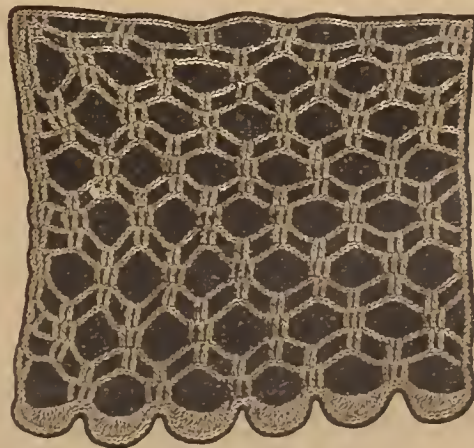
Fried bread is a delicacy if served properly. Cut the bread thin and dip it into a cream made by beating an egg and a couple of tablespoonfuls of milk together. Have the skillet hot, and use just enough butter and lard to keep the bread from sticking, without soaking in the grease. Fry to a delicate crisp brown, and serve a piece at a time to eat with butter and syrup, or put a bit of jelly on each slice.—McCall's Magazine.

**Germania Lace**

MAKE a chain the length desired. First row; a tr in 9th st of ch from hook, and a tr in each of the next 2 st. \* 7 ch, miss 6 st, then a tr in each of the next three stitches; repeat from \* finishing with three trebles at end. Make the trebles at the end of each row a little loose, to prevent the edges drawing.

Second row; ch 3 for a tr, then a tr between 2d and 3d tr of previous row, ch 3, \* 2 tr under 7 ch, ch 3, miss 1 st of 3 tr, a tr between 1st and 2d and 2d and 3d, ch 3, repeat from \*, finishing with two trebles at the end.

Third row; ch 3, a tr between the 2 tr at end, and a tr in next st of ch. \* ch



GERMANIA LACE

7, miss 2 tr, then a tr on ch before next 2 tr, a tr between the 2 tr, and one on ch following. Repeat from \*, finishing with a ch 3 and 3 tr, making one tr before the two trebles at the end, and two between them.

Fourth row; like second row.

Fifth row; same as 3d row to the \*; then ch 3. Next make 3 tr over 2, then repeat from star in third row, finishing with seven chains and three trebles.

Sixth row; like second row.

Seventh row; same as third row.

Eighth row; like second row.

Ninth row; same as fifth row.

Continue in this way, making the lace as deep as desired. The last row made should be the one having the ch 7, and 3 tr, under the 7 ch. Work 1 dc, 10 tr, 1 dc, and make a dc between each of the three trebles. If preferred these

small scallops may be omitted when making this lace to trim handkerchiefs, etc. This design may be used for making children's dresses, lining them with blue or pink silk; also for children's bonnets, ladies' blouses, window draperies, pincushion covers, and worked with No. 80 or 90, or finer thread, it makes beautiful borders for handkerchiefs. MRS. J. R. MACKINTOSH.

**Possibilities of Bread-Sponge**

LIGHT BISCUITS—When kneading bread set aside a small loaf for biscuits. Into this work a heaping tablespoonful of lard and butter mixed, and a teaspoonful of sugar. Work thoroughly. Mold down twice before making into biscuits. Roll out and cut with a biscuit cutter. Put them loosely in a pan and set where it is quite warm. They should rise and be ready for the oven in twenty minutes.

SWEET BISCUITS—Take four cupfuls of light dough, a cupful of sugar, half a cupful of melted butter and three eggs. Mix well and add enough flour to make a soft dough. Let rise, knead well, and make into biscuits. Let rise again and bake.

SWEET BREAD—Take a quart of light bread-sponge, and let rise until double its size; then mix in two ounces of butter, four ounces of granulated sugar, a large teaspoonful of cinnamon and one of caraway seeds. Knead thoroughly and let rise again. Knead again ten minutes. Put into a greased baking-pan, brush the top with melted butter, and when light bake in a moderate oven.

CRUMPETS—One quart of dough, three eggs beaten separately; gradually add warm sweet milk until it is a rather thin batter. Beat well and let it rise. Bake in small round cakes on a hot griddle.

TEA CAKE—Into three cupfuls of bread-dough mix one tablespoonful of lard, one tablespoonful of sugar and a cupful of currants. Let rise until very light. Bake, and let cool; then cut in slices and toast. Butter and serve while hot.

BREAD CAKE—Take one coffee-cupful of bread-dough, one coffee-cupful of white sugar, butter the size of an egg, two eggs, one teacupful of raisins, one teaspoonful each of cinnamon and cloves, half a teaspoonful of grated nutmeg, half a teaspoonful of soda, half a teacupful of flour. Put the dough, sugar, butter and eggs into a cake bowl. Stir and mix with the hand until the mass is creamy. Then add the mixed flour, spices and soda. When thoroughly mixed beat hard with a cake spoon. Pour into a greased pan; let stand twenty minutes and bake.

CINNAMON ROLLS—Take a piece of sponge large enough for a loaf. Roll it out thin, spread butter over it and sprinkle sugar over the butter; then dust thickly with cinnamon. Roll up, cut off pieces about two inches long, pinch one end together so the sugar cannot run out. Put them in a pan with that end down. Set in a warm place to rise and bake in a moderate oven.

LEMON TWIST—Take enough light sponge to make a small loaf. Work into this two tablespoonfuls of sugar and half a cupful of lard. Roll out half an inch thick, spread with butter, and cover thickly with sugar mixed with the grated rind of one lemon. On the sugar drop carefully a tablespoonful of lemon extract. Twist the dough; let it rise, and bake in a moderate oven.

RAISED DOUGHNUTS—Use one quart of light bread-sponge. Beat together three eggs, two cupfuls of sugar, half a cupful of butter and half a nutmeg; add these to the sponge, working them in, with enough flour to make a soft dough. Set to rise in a warm place. When the dough has doubled in size, turn out on the board, and roll to half an inch in thickness. Cut in rings, and leave them on the board in a warm place for an hour longer. Fry in deep fat. Dust with powdered sugar while hot.

GERMAN DOUGHNUTS—Prepare the sponge like the above. Let rise quite light; then form into little balls about the size of an egg. Let them lie on the board while a kettle of fat is heating. When the lard is hot take a ball and pull it out thin; then drop it in the hot lard and fry brown, turn so as to brown on both sides. Roll while hot in sugar. To be eaten warm.

MRS. W. L. TABOR.

**To Keep Corn Fresh**

A GOOD way to keep corn on the cob fresh is to stand the ears in about three inches of water as you would asparagus. By this method the corn can be nicely preserved for two days and two nights after pulling.



Some Fish Stories for the Young People



DON'T CARE IF THE FISH DON'T BITE



A PROFESSIONAL



A QUIET NOOK. A BAITED HOOK, CAMERA-MAN, PICTURE TOOK



FIRST LESSONS



FISHER-MAIDENS





Sunday Reading

Glory of a Young Man's Life

Do not dare to live without some clear intention toward which your living shall be bent. Mean to be something with all your might. Do not add act to act and day to day in perfect thoughtlessness, never asking yourself whither the growing time is leading. But at the same time, do not dare to be so absorbed in your own life, so wrapped up in listening to the sound of your own hurrying wheels, that all this vast pathetic music made up of the mingled joy and sorrow of your fellow-men, shall not find out your heart and claim it, and make you rejoice to give yourself up for them. And yet, all the while, keep the upward windows open. Do not dare to think that a child of God can worthily work out his career or worthily serve God's other children unless he does both in the love and fear of God their Father. Be sure that ambition and charity will both grow mean unless they are both inspired and exalted by religion. Energy, love and faith—these make the perfect man. And Christ, who is the perfectness of all of them, give them all three to any young man who, at the very outset of his life, gives himself to him. If there is any young man who generously wants to live a whole life, who wants to complete himself on every side, to him Christ the Lord stands ready to give these three, energy, love and faith, and to train them in him altogether, till they make him the perfect man.—Phillips Brooks.

Lapland Babies on Sunday

IN LAPLAND the mothers love to go to church, and they go regularly to church every Sunday, even when they have little babies to care for and when they have not a nurse. They wrap the babies up in warm clothes, often in bearskins or something just as warm, and then carry them along to church. Even if they have to go ten or fifteen miles, they will take the baby along. They usually go in sleighs drawn, not by a horse or a mule, but by a reindeer. Did you ever see a deer pulling a sleigh?

As soon as the family arrives at the little church and the reindeer is secured, the father Lapp shovels a snug little bed in the snow, and mother Lapp wraps baby snugly in skins and lays it down there. Then father piles the snow all around it, and the parents go into the church.

Over twenty or thirty of these babies were out there in the snow around the church, and I never heard of one that was suffocated or frozen. And the little babies are not strong enough to knock the snow aside and get away, so they just lie still there and go to sleep. Then when church is out the father goes to where the baby is and puts his hands down into the snow and pulls the baby out and shakes off the snow, and then the reindeer trots off a good deal faster than a horse and takes them all home again.—From an Exchange.

THE greatest hindrance to advancement among mankind that religion has had to contend with, has been the idea that it is a kind of slavery to which none can submit without sacrificing the natural enjoyments of life. How much wiser and better we would be if we could carry along with us, from infancy to old age, the full conviction that happiness is the substantial cultivation and exercise of the Christian virtues.

Good for Fits

FOR a Fit of Passion.—Walk out in the open air; you may speak your mind to the winds without hurting anyone or proclaiming yourself a simpleton.

For a Fit of Idleness.—Count the ticking of a clock; do this for one hour, and you will be glad to pull off your coat the next and work like a beaver.

For a Fit of Extravagance and Folly.—Go to the workhouse or speak to the inmates of a jail, and you will be convinced that he

"Who makes his bed of brier and thorn, Must be content to lie forlorn."

For a Fit of Ambition.—Go to the churchyard and read the gravestones; they will tell you the end of ambition.

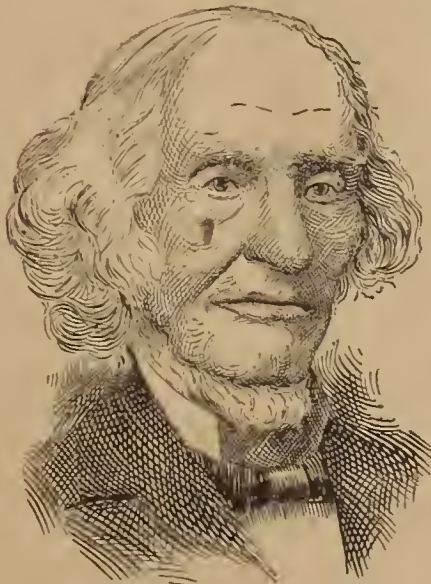
For a Fit of Despondency.—Look on the good things God has given you in this world and to those he has promised to his followers in the next. He who goes into his garden to look for cobwebs

and spiders no doubt will find them; while he who looks for a flower may return into his house with one blooming in his bosom.

For all Fits of Doubt, Perplexity and Fear.—Whether they respect the body or the mind, whether they are a load to the shoulders, the head, or the heart, the following cure may be relied on, for I had it from the Great Physician: "Cast thy burdens on the Lord, and he will sustain thee."—Lutheran Observer.

Life Beyond Death

"MAN is made for the Infinite," says Pascal. "We desire immortality, not as a reward of virtue, but as its continuance," says Jean Paul Richter. So close is this kinship with the divine that to lose faith in God and immortality is to lose hope in the world. Professor Le Conte has wisely said, "Without immortality this beautiful cosmos, which



REV. DR. HOWE

Probably the Oldest Active Clergyman in the World. His One Hundredth Birthday Anniversary was Celebrated on May 25th Last, at His Home in Cambridge, Massachusetts

has been developing into increasing beauty for so many millions of years, when it has run its course and all is over, would be precisely as if it had never been, an idle dream, an idle talk, signifying nothing." Sully says, "To abandon hope of a future life is a vast loss, not to be made good, so far as I can see, by any new idea of service to humanity." Strauss confessed that when he had lost his faith in God and immortality he lost his interest in human life and in the world he inhabited. He saw nothing to live for. And Professor Clifford, after losing his religious faith, said, "We have seen the sun shine out of an empty heaven to light up a soulless world; we have felt with utter loneliness that the Great Companion is dead." A being thus related to God, made in his image and fitted for communion with him, endowed with the capacity of knowing, loving and enjoying him forever, prepared and disciplined for a career of never-ending glory and blessedness hereafter, can have its full fruition only in a life beyond the grave.—Hugh Johnson, in "Beyond Death."

A Good Watchword

ALL deeds run to cover. The way to live a clear, clean, innocent life is to keep always in the light. The moment you detect yourself glancing sidewise to see if anyone is looking, that moment distrust the thing you are about to do. Turn on the light. Open every shutter and pull up every curtain. Set the doors ajar. Speak up loud and clear—no whispering. Call in somebody to see what you are doing. If your purpose stands these tests it is wisdom and innocency; not otherwise. "Open and above board," is the only motto, and it is one that will carry you serenely and safely through all sorts of sophisticated temptations. Just simply take this for a watchword: "Will it stand the light?" You will not need to argue down your conscience; you will not need to puzzle out "the rights of it." Ithuriel's spear was not more potent to detect falsehood than this simple, honest question that each of us is competent to ask and answer: "Will it stand the light?" If it will not, drop it. The great white light will soon be all around us. We need not fear that, if we set all our conduct now in the light of God's countenance.—Congregationalist.

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**Practical Fashions for Early Fall**

By Grace Margeret Gould



No. 790—Tucked Tailor-Made Shirt-Waist  
Pattern cut for 34, 36, 38 and 40 inch bust measures. Quantity of material required for medium size, or 36 inch bust, four and one fourth yards of twenty-two-inch material, or three and one half yards of thirty-six-inch material

WITH the coming of the fall the tailor-made shirt-waist will be among the pronounced and highly approved fashions. The pendulum of the modes has swung round to it again as a reaction from the filmy, much-trimmed lingerie blouse. These waists are severe in style, and of course are made with long sleeves. The soft taffetas with a broche figure in self-color, will be much used for these waists. And many of them will also be made of flannel and cotton shirtings, showing a striped or figured pattern.

Though the lingerie waists will continue to be fashionable, yet this fall they will have to divide the honors with waists fashioned of light-weight chiffon-finished silks. These silk waists are being made up on pale yellow, delicate blue and faint pink, and they show many tuckings and insets of lace.

The tucked tailor-made shirt-waist illustrated on this page, is an exceptionally good model to carry out in one of the new flannels shown this fall. No matter how much of a novice at dressmaking a woman may be, she will have no difficulty in making this shirt-waist.



No. 791—One-Piece Plaited Dress  
Pattern cut for 4, 6, 8 and 10 year sizes. Quantity of material required for medium size, or 8 years, seven yards of twenty-two-inch material, or four and three fourths yards of thirty-six-inch material

A slight double-breasted effect is given this dress by the way the tabs button over. The deep fitted cuffs are also finished with a tab and a button at the upper edge. Prunella cloth would be a good material to use for the dress, with stitching and the buttons for the trimming



THE pinafore waist is to be one of the favorite fall fashions, and many and varied are the designs in which it will be shown. The model here illustrated is made with an extremely pretty cap sleeve, and a becoming neck effect. The waist is cut out sufficiently at the neck, back and front, so that it may be slipped over the head. It is worn with a plaid shirt-waist. And, by the way, plaids are to be high style this fall, especially those in the shadow effects.



No. 792—Misses' Pinafore Waist  
Pattern cut for 14, 16 and 18 year sizes. Quantity of material required for medium size, or 16 years, two and three fourths yards of twenty-two-inch material, or one and seven eighths yards of thirty-six-inch material, with two and three fourths yards of thirty-six-inch material for the shirt-waist

No. 793—Misses' Plaited Skirt—Five Gores  
Pattern cut for 14, 16 and 18 year sizes. Quantity of material required for medium size, or 16 years, seven yards of twenty-two-inch material, or five yards of thirty-six-inch material

No. 794—Plaited Dress  
Pattern cut for 6, 8 and 10 year sizes. Quantity of material required for medium size, or 8 years, five and one half yards of twenty-two-inch material, or three and one half yards of thirty-six-inch material, with three fourths of a yard of silk for trimming



No. 795—Father Knickerbocker Suit  
Pattern cut for 4, 6 and 8 year sizes. Quantity of material required for medium size, or 6 years, four and three fourths yards of twenty-two-inch material, or three and one eighth yards of thirty-six-inch material, with one half yard of all-over lace or embroidery for collar and cuffs

THE little Father Knickerbocker suit and the Peter Pan dress for girls, are the two leading styles in children's garments for the autumn. Many one-piece dresses will also be worn, and little plaited dresses with novel waist trimmings, as shown in the illustration No. 794. The smartest of the Father Knickerbocker suits are made in black and white check, with white embroidery or lace for the turn-down collar and flaring cuffs. The vest is preferably white, either white piqué or fine white cloth, though in the brown-and-white checked suits a light tan vest may be worn if preferred.

The Peter Pan waist must not be mistaken for a sailor blouse, for when made correctly it should have more the look of a shirt than a blouse. Very few of the skirts of the children's dresses this fall will be cut circular. Plaits are not only better style, but are more satisfactory in every way, and also more becoming to young girls.



No. 796—Peter Pan Dress  
Pattern cut for 6, 8, 10 and 12 year sizes. Quantity of material required for medium size, or 8 years, five and one half yards of twenty-two-inch material, or three and three fourths yards of thirty-six-inch material, with one half yard of silk for pocket, cuffs and collar

This Peter Pan shirt-waist should be finished with a belt to which buttons are sewed. The five-gored skirt, which has plaits at the center, back and front, should have buttonholes worked in the skirt band, and then by means of the buttons and buttonholes, the shirt-waist and the skirt may be held snugly together



Something to Please the Children

Something to please the children,  
 Something to entertain!—  
 Shall I dance, my dears, or wiggle my ears,  
 Or balance myself on a cane?  
 Shall I stand at the parlor casement  
 And sing to the crowd below?  
 Or pour hot tea over Grandpa's knee  
 In a comical way I know?

Something to please the children;  
 Anything droll will do!  
 Shall I lash myself to the mantel shelf  
 And poke my feet up the flue?  
 Shall I spill hot wax on the carpet  
 Or cover my nose with soot,  
 Or gum my hair, or drop a chair  
 On the top of my gouty foot?

Something to please the children;  
 Something that's light and gay!  
 Shall I whistle and scream at the butcher's  
 team  
 So the horses will run away?  
 Shall I hang the cat to the curtain,  
 Or scare Aunt Jane with a mouse?  
 Shall I stutter and groan through the tele-  
 phone  
 And then set fire to the house?

Something to please the children;  
 Nothing that's trite and tame!  
 They crow with glee as they come to me—  
 I'm never at loss for a game.  
 They greet me as Uncle Henry,  
 And jolly good times they see  
 In the jovial ways and genial plays  
 Of an elderly man like me.  
 —Wallace Irwin in the "Saturday Even-  
 ing Post."

Expected to Give Her Pleasure

A. J. Drexel Biddle, who wrote a book on Madeira, said the other day, according to an exchange:

"Madeira is a delightful place. One of its greatest, one of its strangest delights is coasting. You coast down the steep mountain-sides in a wicker basket with wooden runners, and so fast do you go that sometimes your runners smoke, some-times they even burst into flame.

"This coasting in Madeira's May-time weather is a strange pleasure. I can't describe its strangeness. It reminds me"—he smiled.

"It reminds me in its strangeness of a Christmas gift that was sent last month to a certain maiden lady.

"The gift was sent to her by her nephew, and afterward he described it thus:

"At first I could not think of anything to give Aunt Mary for Christmas, and then, suddenly, I remembered that she was an old maid, wholly unacquainted with the grand passion, and so, in order to give her a unique pleasure, I sent her an anonymous love letter."—Commercial Tribune.

Steam Was Uncertain

A stranger who was making his first visit to one of the popular summer resorts of the interior, took a stroll on the morning of his arrival along the bank of the stream that ran near the hotel. The first person he encountered was an elderly resident of the neighborhood, who was sitting on a log, busily occupied in fishing. He stopped and entered into conversation with him.

"Good morning," he said.  
 "Mornin', cap'n," responded the old man.

"Is the fishing good?"  
 "Jist toler'ble like. Sometimes it's kind o' good an' sometimes it ain't wuth shucks."

"Catching anything?"  
 "Yeh. Ketched a few carp. Ain't nuthin' else bitin' this mornin'."

"Is this a navigable river?"  
 "Is it what?"  
 "Navigable?"  
 "No; this is the Kershaw River."

"I mean, is it deep enough for boats?"  
 "Sure. Don't you see that skiff over there?"

"Yes, but can steamboats travel up it?"  
 "Sure."  
 "How big?"

"Mister," said the old man, "oncet or twicet a year the biggest ships that ever was built could come cavortin' right up this river, an' the rest o' the year a long-legged chicken could wade it 'thout gittin' his tail-feathers damp."—Youth's Companion.

Both Sexton and Dog

A man strolled into a fashionable church before the service began. The sexton followed him up, and, tapping him on the shoulder and pointing to a small cur that had followed him into the sacred edifice, said: "Dogs are not admitted." "That's not my dog," replied the visitor. "But he follows you." "Well, so do you." The sexton growled, and immediately removed the dog with unnecessary violence.



Wit and Humor



No Place for Tunnels

A story is told of a negro living in a sparsely settled portion of a certain Southern state, who was informed by a fellow negro that it was rumored that their town was to be made the terminus of a branch railway system.

"I don't believe no sich repo't," observed the first darky, decisively; "I's traveled, and I knows what I'm talkin' 'bout. Them railroad people can't build no line in dis here flat country."

"What makes you think dat?" asked the second negro.

Whereupon the other, with an air of effectually settling the whole matter, replied:

side of the mountain, and the train never left the track, and not a person was hurt."

"How wonderful! And how jolly to have been in an accident of that kind. It would be something to remember all one's life. What a lot one can learn by traveling!"—Lippincott's.

Sleeping with a Rooster

Dr. Grenfell, Labrador's famous medical missionary, tells an experience that befell him in a small, overcrowded house where he had to pass the night.

There was absolutely no place for him to sleep except on top of the hen-coop. For a man used to hardship that was nothing, but for a man tired by a long journey it was much that the rooster underneath should almost at once manifest a determined predilection for untimely noise.

It was not long to be borne—but neither was the neck of his host's rooster to be wrung in a land where fowls are scarce. Nevertheless, he thrust down his hand between the slats, grabbed the bird's neck and held on to it, with a grasp tight enough to produce silence, though not suffocation.

But as the doctor grew sleepier his grasp would relax. Then the outraged captive would emit a feeble squak, or the beginnings of a cock-a-doodle-doo not destined to be finished, for the first notes would again rouse the sleeper, who would straightway tighten his clutch once more.

So the night passed. When morning came the rooster was alive, although afflicted with a stiff neck, and the doctor had slept—a little.—Montreal Witness.

A Fuel Supply

An Irishman who wished to come to America shipped on board a vessel as sailor. During the voyage across the Atlantic a friend of his, who was also a sailor, died. Pat had known him in the



—Maybell in Brooklyn Daily Eagle

THE MARCH OF CIVILIZATION

Indian—"I poisoned arrows for my enemies, but never poisoned food for my friends"

"Can't yo' see dat dere ain't any place round here to run tunnels through?"—Harper's Magazine.

Wonderful

A tourist who sat behind a bridal couple on the Pike's Peak Railway last summer, says that he overheard the bridegroom giving his bride information regarding the difficulties that had been overcome in constructing some of the Rocky Mountain railroads.

"Do you know, dear," he said, "that the grade of this road we are riding over is more than thirteen thousand feet to the mile?"

"How wonderful!" she said languidly.

"Yes, and there is a line of road in this state where there is what they call the 'loop,' and they say that when a long train of cars is going over it they have to run very slow to keep the cow-catcher from shoving the last car of the train off the track, for it is right in front of the engine."

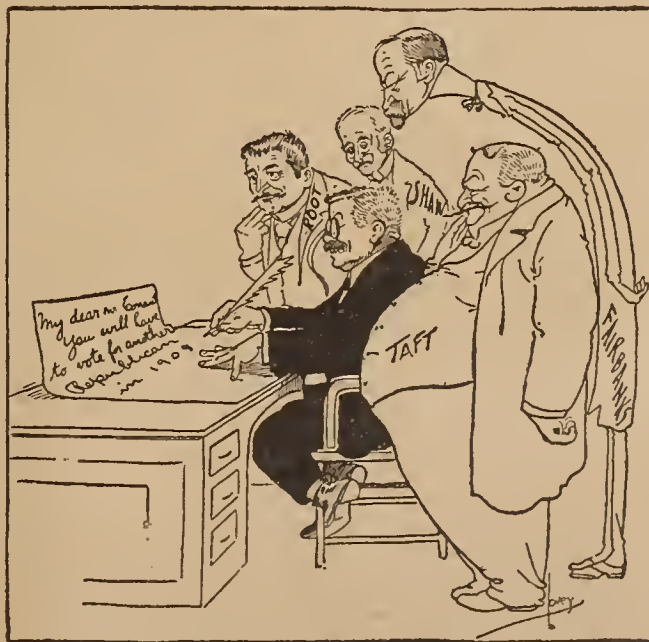
"How wonderful!"  
 "Isn't it though? And there is one place here where if you drop a stone from the car window it will fall in a straight line nineteen thousand feet before it strikes anything."

"How wonderful!"  
 "Yes, and they say that the velocity of the wind on Pike's Peak sometimes reaches forty-six thousand miles an hour."

"Just think! Isn't it wonderful?"  
 "And the ties and rails for some of these Rocky mountain railroads had to be brought away up here on the tops of the mountains on the backs of some of those little burros we saw down below."

"How remarkable! And how sweet of you, dear, to bring me out here where such wonderful things have happened. It's ever so educational and awfully interesting. You are sure we will get down all right, dear?"

"Oh, yes, there's no danger. They say they never had but one accident on this road, and that was a mighty curious one. They had a big mountain landslide once, and a section of track a quarter of a mile long with a passenger train on it slid half a mile right down the



—Lovoy in the Salt Lake Herald

CHORUS—"WONDER IF I'M IT!"

old country. It is the custom, when a person dies at sea, to sew the body up in a sack, hang a weight to it to make it sink, and drop it overboard with a prayer. Well, when O'Rourke died, they had no shot to weigh it with, so had to put in two or three big lumps of coal, instead. Pat was there to see the last of his friend. When the sack was lowered into the water, Pat said, with tears in his eyes: "Oi always knew O'Rourke to be a bad man, and Oi often told him where he was goin' phin he doid, but Oi didn't t'ink he'd have to take his own coal wid him."

Bryan and the Goat

Last year William Jennings Bryan visited Cornell University. While being

entertained at dinner by a prominent legal fraternity he told the following story on himself:

Once out in Nebraska I went to protest against my real estate assessment, and one of the things of which I particularly complained was assessing a goat at twenty-five dollars. I claimed that a goat was not "real" property in the legal sense of the word and should not be assessed. One of the assessors, a very pleasant-faced old man, very obligingly said that I could go upstairs with him and together we would look over the rules and regulations and see what could be done.

We looked over the rules and finally the old man asked: "Does your goat run loose on the roads?"

"Well, sometimes," said I, wondering what the penalty was for that dreadful offence.

"Does he butt?" again queried the old man.

"Yes," I answered, "he butts."

"Well," said the old man, looking at me, "this rule says, tax all that certain property running and abutting on the highway. I don't see that I can do anything for you. Good day, sir."—Lippincott's Magazine.

"You take a great deal of interest in these discussions of proposed legislation," said the postmaster.

"Yes," answered Farmer Corntassel. "Although sometimes it's hard for me to make out whether they're discussing proposed legislation or jes' quarrelin' among themselves about who shall be boss."—Washington Star.

Done Enough

A Revolutionary veteran, running for Congress in days before the Civil War, had as his opponent a young man who had never been a soldier. In his speeches the Revolutionary hero made the most of his "record."

"Fellow citizens," he would say, "I have fought and bled for my country. I have helped repulse the British tyrant; I have helped repel the savage Indian. I have slept upon the field of battle with no other covering than the canopy of heaven. I have plodded barefoot over the frozen ground until every footstep was marked with blood."

At the close of one of these speeches an old man, wiping the tears from his eyes with the ends of his coat tails, elbowed his way up to the speaker.

"You've fought both the British an' the Injuns?" he asked.

"I have, sir."

"An' you've slept on the ground without kiver?"

"I have, sir."

"An' ye say that your feet have covered the ground ye walked on with blood?"

"They have, sir," said the speaker, delighted that his words had made such a profound impression.

"Well, then," said the old man, turning away with a sigh of deep emotion, "I'm a-feered I'll have to vote fur that other feller, fur I'll be gosh blamed if you ain't done enough fur yer country already."

Warm

May Roxley (at the telephone)—"That you, Jack? You know you promised you'd speak to father to-day?"

Jack Lovett—"Yes, I—er spoke to him this morning at his office."

May Roxley—"Oh! What did he say?"

Jack Lovett—"Why—er—I didn't wait to hear all of it."—The Catholic Standard.

Some Familiar Lines

The boy stood on the burning deck,  
 His fleece was white as snow;  
 He stuck a feather in his hat,  
 John Anderson, my Jo!

"Come back, come back!" he cried in grief,  
 From India's coral strands,  
 The frost is on the pumpkin and  
 The village smithy stands.

Am I a soldier of the cross  
 From many a boundless plain?  
 Should auld acquaintance be forgot  
 Where saints immortal reign?

Ye banks and braes o' bonny Doon  
 Across the sands o' Dee,  
 Can you forget that night in June—  
 My country, 'tis of thee.

Of all sad words of tongue or pen,  
 We're saddest when we sing,  
 To beard the lion in his den.  
 To set before the king.

Hark! from the tombs a doleful sound,  
 And Phœbus 'gins arise;  
 All mimsy were the borogroves,  
 To mansions in the skies.  
 —Cleveland Leader.



### Purchase of Horse by Minor and Giving Mortgage

B. A., North Carolina, inquires: "A. bought a horse from B. but could not pay for it at once. A. is eighteen years old and gives a mortgage on the horse and on another horse which belongs to his brothers and sisters just as much as himself. Does B. have any right to take the horse he did not sell to A?"

The entire transaction on the part of the minor is a voidable one in law; that is, the minor may avoid the contract if he so chooses, but in so doing he must return that which he has received. B. would have the right to take back the horse, but in my judgment he would have no right to take the other horse, which was included in the mortgage.

### Legitimacy of Child

W. C., Maryland, asks: "A. and wife have a child that was born out of wedlock five years before they were married, though A. and wife are the child's parents. Would the child be a lawful heir of A.'s estate at his death?"

Although a child may be born out of wedlock, yet if the parents afterward marry, such child becomes legitimate, especially if such parents acknowledge the child as their own. In the above case the child would be a lawful heir of his father's estate, and the wife would be entitled to a dower, that is a life estate in one third of the real estate, and one third of the personal property absolutely.

### Right to Quit Work and Collect Wages

W. L. E., Ohio, asks: "When a man is working by the month, can he quit work and draw his money any time, or does he have to work his time out to get anything?"

If a man is working by the month, and for no other specified time, he might quit his services at the end of any one month and collect his wages for what is then due. However, if the contract is for a number of months, although payable by the month then the employee would have no right to quit until the end of the term, unless there was good cause for so doing, and if he did quit he could not collect any wages for any services before. Of course if the employer so acts as to violate the contract, or in such a manner as to justify the employee in leaving it, then the employee might collect the wages for the time engaged, and possibly might collect for the entire term.

### Failure of Warranty

N. B., Ohio, says: "On March 20, 1906, I bought a cow at a public sale, the owner saying that she would be fresh about the first week in May. It is now the 9th and there are no indications of her being fresh at all. I gave my note for her; can I be made to pay?"

If she was not fresh within, say three weeks from the first week of May, as represented, I would say that that would be a breach of representation, and that you could recover whatever the damages would be resulting from such failure. This damage could be offset when the note is presented for payment. It is probably such a breach of representation as would entirely avoid the sale. You might return the cow and demand your note, if done within a reasonably short time.

### Collection of Debt Incurred in One Commonwealth in Another—Lawful Money

P. J., Ohio, writes: "Suppose A. owes B. a debt, lawful in Ohio, not secured by mortgage, but a book account or note. Before payment B. moves to Canada; how can he collect on said account or note? Should both A. and B. move to Canada, each taking all their property, could the debt contracted in the United States be collected? Does money, paper or coin, continue to be money after it is taken out of the country in which and for which it was coined or issued? Is money of any country other than the United States a legal tender for debts in this country? Is the United States money legal tender for debts in any other country than this?"

Most assuredly if the debt is a valid one, it could be collected in Canada or in any other country. A debt does not depend for its right of enforcement on the fact that the enforcement is brought in the same state or country where the debt is incurred. Of course it must be valid according to the laws of Canada. Yes, in one sense money continues to be money even after it is taken out of the country for which it is coined or issued, but it is not lawful money of that country. It has its value in such other country fixed by the mercantile law and the laws relating to exchanges between the different countries, and it would not be a legal tender for payment of a debt in any other country than that in which it is made or coined. As to whether or not the money

## The Family Lawyer

Legal inquiries, of general interest only, from our regular subscribers will be answered in this department, each in its turn. On account of the large number of questions received, delay in giving printed answers is unavoidable. Querists desiring an immediate answer, or an answer to a question not of general interest, should remit \$1.00, addressed to "Law Department," this office, and get the answer by mail.

of one country would be a legal tender for debts in another, this would depend entirely upon treaties between the several countries, or in the absence of treaties upon the law of the country in which the tender is made.

### Law in Relation to Spraying Trees

G. W., Ohio, writes: "Is there any law in relation to spraying fruit trees? Some tell me there is a law against spraying trees when they are in bloom on account of bees."

I know of no law regulating or directing the manner in which trees should be sprayed or the material that should be used in spraying them.

### Damage from Trees on Bank of Stream

Inquirer, Ohio, writes: "G. has land along a stream. L. has adjoining land on west. Line is in middle of stream, which is forty to fifty feet wide. The line runs nearly straight in the middle. Trees on G.'s side in time of flood hinder free flow and force current to L.'s side. G. refuses to remove these, claiming they are on his land and not on the line. Neither L. nor G. can have full capacity of channel because of trees."

The only remedy the inquirer would have would be to proceed under the law and have the stream cleared out. That would probably extend far enough on the shore to remove everything that impeded the natural flow of the water. The statute provides that, upon proper petition, the county commissioners have such right. The details you may get from some local attorney.

### Right of Husband to Wife's Property

J. H. W., Ohio, asks: "Can a man hold any of his wife's land when it belongs to her? Can she hold the furniture of the first wife?"

Neither husband nor wife has any absolute right in the property of the other during life, except that neither can sell their real estate free from the inchoate dower rights of the other. Either husband or wife could sell and dispose of all of their property if they saw fit, provided such disposition was made during their lifetime. Whether the second wife could hold the furniture belonging to the first wife, would depend upon the question whether the property had become the property of the husband at the death of the first wife.

### Injury on City Lot by Cattle—Legality of Barbed-Wire Fence

W. E. T., Ohio, writes: "A. buys a lot just inside an incorporated village in Ohio. On the line between the lot and the farm-land outside the village is a barbed-wire fence. A., with the consent of B., the owner of the farm-land adjoining the lot, removes this fence. B. rents this farm-land to a dairyman, whose cows are continually running over A.'s lot, doing much damage. What recourse has A.? Can A. be compelled to build half of the line fence without the consent of both parties? The farm-land adjoining A.'s lot is not pasture land, and B. when he rented it to the dairyman, requested him not to pasture it."

A. made a mistake by removing this fence, as it was on the line, and such a fence as both he and the adjoining landowner were bound to maintain. I very much doubt whether the adjoining landowner would be obliged to build any part of the fence, as the law relating to boundary fences in Ohio does not apply to regularly platted city lots. I very much doubt whether A. has any recourse except to build a fence. A barbed-wire fence is not a legal fence in Ohio, and cannot be put up on the line except by consent of both parties. If B. did not rent the lot to be pastured, then B. could prevent the dairyman's cattle from going thereon, but A. could not.

### Right of Telephone Company Along Highway in Reference to Adjoining Owners' Trees

Seattle, inquires: "A telephone company proposes to run a line by my farm, and since there is a line on the other side of the road, I have reason to believe that they will construct it on my side. They have mutilated beautiful trees all along the highway and I do not propose to have mine mistreated, unless the law allows

it. My trees are not quite high enough yet to be injured, but will be in two years. Can the company erect their line without consent of the landowner? How can I go about it to prevent them? Are they liable for damages done by the construction of their lines to trees along the road?"

The law is well settled that the adjoining proprietors of lands on a public highway own the land of the highway subject only to such proper use as may be made of the highway for the general purpose of a highway or public road. The thing to be done is not to let the telephone company erect the poles, unless they will enter into an agreement not to disturb or mark the growing trees. If they attempt to erect the line or put up poles, consult a lawyer at once and enjoin them.

### Selling Personal Property Covered by a Mortgage

W. M. B., Pennsylvania, writes: "I sold a farm last fall, and the farmer had to pay one half of the taxes, but did not have the money and gave me a bill of sale of all the grain in the ground, and I paid his taxes, but when harvest came, he cut the grain and hauled it home and used it without me knowing anything about it, and refuses to pay me. Can I have him arrested for taking the grain?"

It is generally provided by the laws of the various states that a person who sells property covered by a mortgage is guilty of a criminal offense and may be prosecuted.

### Right of Wife to Leave Husband

C. H. B., Ohio, writes: "If a man does not support his wife and minor child, can she, not desiring to make the matter public or get a divorce, legally go to another state to live, taking with her the minor child? If she left, would she still have a right to her share of his property in case he died? She does not contemplate running away with another man, however, but believes the change to be to the best advantage of herself and child."

If the husband does not give to the wife that degree of support which she needs to enable her to live in the condition which her social standing entitles her, then she could leave him, and would be justified in so doing. He could not get a divorce or defeat her right in his property on account of her conduct, but if she should leave him without cause, and should be absent from him for three years then he might get a divorce, in which case she might be deprived of all her rights in his property. If the husband died without divorce she would be entitled to her property rights.

### Fence Law in Ohio

J. L. H., writes: "Can I be compelled to build or pay for half of line fence when it gives me no enclosure, or in other words where I have no fence on the other three sides of my land?"

Yes, under the present fence law of Ohio, you would be compelled to build one half of the line for partition fence, notwithstanding the fact that all the rest of your lands are not in an enclosure.

### Matters Relating to Property

F. C. B., Ohio, writes: "An aunt of mine, now about 72 years old, single, living alone, has a place of three acres, where she lives in an old tumbling house which she bought some thirty-seven years ago with money left her from her father's estate. She also has some fourteen acres across the road, given her by her father some forty-six years ago. A neighbor has been paying taxes on her two places, one place about twenty-five years and the other place not quite so long. One place has nothing on it except some corn-sheds in one corner, where she keeps two cows. The place of three acres she still keeps as her home. The house is scarcely fit to hold together much longer. I have been trying several times to get a settlement out of the man who has been paying taxes, and he has also paid road-tax, and I have heard a state deed has been obtained by him. He keeps saying he will let me know just how matters are, but never does. I employed a lawyer about two years ago, but he was from town, the taxpayer also is from here, so I think they must have hushed matters up, for the lawyer never wrote me as he agreed to do.

How long can she continue to live on this land? Can this tax payer put her off? Could he sell the two properties? Could there be any way of putting up a new cottage so we could get our money back? If she leaves the place to live with us, could the tax-payer get possession?"

In the above case I should think it advisable to examine the records in the county auditor's office, and ascertain whether or not the man who has been paying taxes has acquired a tax title. If he has, legal proceedings should be taken at once to have it set aside, as it might ripen into a title to the real estate. If the property belongs to the aunt she can do with it as she pleases, she could sell it, or if she did not desire to do that, she could mortgage it and raise money with which to put up a proper house. This matter as to how he holds the title should receive investigation at once, and it would require the assistance of a local attorney.

### Adverse Possession

A. B. C., Virginia, writes: "There are six shares in a parcel of land. A. buys four shares, holds and pays taxes on it for seventy years, undisturbed. Could the other two shares be claimed, if there were any living heirs?"

As a general rule, one tenant cannot hold adversely to the interests of the other tenants; so in the above case it might be that a title would not ripen by ordinary adverse possession; but the fact of having held it so long with no assertion of any title by another person and the fact that this person was in adverse possession, claiming ownership at this time, it would give him a reasonably good, although not a perfect title. A local attorney could give you better advice, but I believe the title is reasonably good.

### Taxation of Bonds of Corporations

An old reader, Ohio, inquires: "When the owners of an electric street-railway company, and also the stockholders, each pay taxes on the road and shares of stock, does the law require the bond-holders to pay taxes on the bonds?"

In Ohio, the owners of stock in a domestic or Ohio corporation, are not obliged to list the same for taxes, as the same is presumed to be listed for taxes by the corporate body. But bonds of such corporation stand in a different light; they are similar to mortgages held on real estate, and a species of double taxation, the justice of which has long been in doubt by the people of this state.

### Qualifications for Studying Law

J. W. T., Ohio, writes "Does the law of the state of Ohio require a person to have a high-school education before studying law?"

The rule adopted by the Supreme Court is, that anyone can take an examination whose educational attainments are clearly shown to be equal to those indicated by a four-year course of study in a public high-school of this state. There is a provision further that applicants who cannot present evidence of such educational attainments will be required to take an examination before the standing committee of the Supreme Court appointed for that purpose, and that committee will be required to give a certificate if the applicant passes an examination. Further information in reference to this subject can be gotten by addressing the Clerk of the Supreme Court, Columbus, Ohio.

### Inheritance

A. M., New York, writes: "Who inherits a wife's property, she leaving husband and children?"

The children inherit the property. The husband, however, having a life estate in the real estate of the wife.

### Laws of Descent

C. P. G., Oregon.—In Oregon, if either husband or wife dies without children, the survivor gets all the property absolutely, and can make such disposition of it as he or she shall see fit. The husband or wife might control the disposition by will.

### Law of Congress Relating to Land

H. M. B., California, writes: "Did Congress ever pass a law making the title to the first grants of land in Virginia and Kentucky good to the heirs for all times? Can you tell me the early limitation law of these states?"

I have no knowledge of Congress ever passing a law such as the querist refers to, and would say that it is my opinion that no law of that kind was ever passed. I cannot give you the early limitation laws of these states.

*John M. Rockel*



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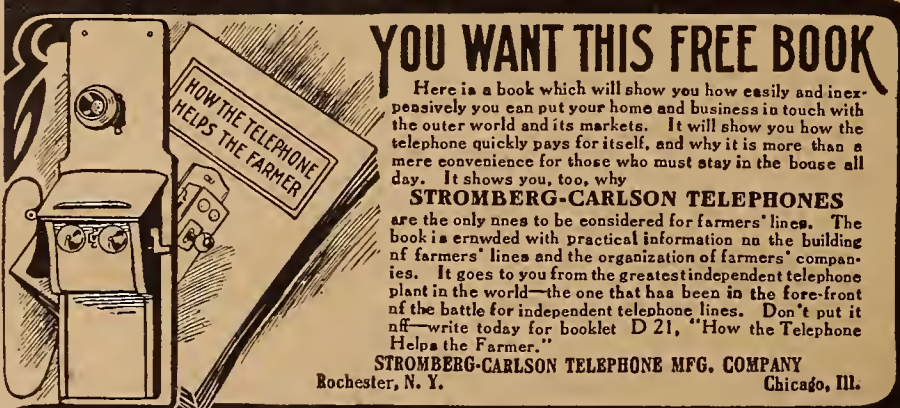
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STROMBERG-CARLSON TELEPHONE MFG. COMPANY  
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can be made from a given amount of apples with one of our presses than with any other. The juice will be purer and bring higher prices; the extra yield soon pays for the press. We make

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Before you buy a watch out this out and send to us with your name and address, and we will send you by express for examination a handsome WATCH AND CHAIN C. O. D. \$3.75. Double hunting case, beautifully engraved, stem wind and stem set, fitted with a dolly jeweled movement and guaranteed a correct timekeeper, with long Gold plated chain for Ladies or vest chain for Gents. If you consider it equal to any \$35 GOLD FILLED WATCH Warranted 20 YEARS pay the express about \$3.75 and it is yours. Our 20 year guarantee sent with each watch. Mention if you want Gents' or Ladies' else. Address H. FABER & CO., 443, 25 Quincy St., CHICAGO.



## WE WANT NAMES.

We want YOU to send us the names and addresses of from ten to twenty-five farmers living in the United States, having a few head of stock (cows, horses, pigs). You can send us the names from any number of different post-offices. If you will send us these names we will send you TWO BEAUTIFUL COLORED PICTURES FREE. These pictures are reproductions of the most celebrated paintings in the world, and they are of high quality, and we know that you will be pleased and delighted with them; no pictures will be given for a list of less than ten farmers.

We want to send a sample copy of the RURAL HOME to a lot of farmers who are not now taking our paper, and for that reason we want these names.

Send us immediately a list of at least ten farmers and we will send you, postpaid, ABSOLUTELY FREE, TWO REPRODUCTIONS OF THE WORLD'S FAMOUS PICTURES, in beautiful colors, size 15x20 inches. Address THE RURAL HOME, 22 North William St., New York, N. Y.

### FREE SIX SHOTS IN FOUR SECONDS

Book Tells of This Gun

No other Shot Gun equals this gun's record. No gun built, for the money, that is as good. \$4.00 to \$27.00. Hammerless. Every modern improvement. Nothing as good on the market. Our catalogue shows a dozen other guns of Winter Wheat, Rye, Barley, Clovers, Timothy, Grasses, Bulbs, Trees, etc., for fall planting.

JOHN A. SALZER SEED CO., La Crosse, Wis.



### STARK TREES ARE FAMOUS

wherever planted; are planted everywhere trees are grown. Free Catalog of superb fruits—Black Ben, King David, Delicious, etc.—Stark Bro's, Louisiana, Mo.

### 60 Bus. Winter Wheat Per Acre

That's the yield of Salzer's Red Cross Hybrid Winter Wheat. Send 2c in stamps for free sample of same, as also catalogue of Winter Wheat, Rye, Barley, Clovers, Timothy, Grasses, Bulbs, Trees, etc., for fall planting.

JOHN A. SALZER SEED CO., La Crosse, Wis.

### PARKER'S HAIR BALSAM

Cleanses and beautifies the hair. Promotes a luxuriant growth. Never Fails to Restore Gray Hair to its Youthful Color. Cures scalp diseases & hair falling.

50c. and \$1.00 at Drug-gists.



### CRIMSON CLOVER SEED

\$5.00 per bushel or \$4.50 per bushel in 25 bushels and over.

JOSEPH E. HOLLAND, Milford, Del.





AN ILLUSTRATED FARM AND FAMILY JOURNAL

EASTERN EDITION

Vol. XXIX. No. 24

SPRINGFIELD, OHIO, SEPTEMBER 15, 1906

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### Buying Goods by Mail

I HAVE done considerable buying of goods by mail from advertisers. From the firms advertising in FARM AND FIRESIDE I have had very satisfactory results, especially in the matter of farm implements. I purchased a buggy for \$42.50 that I am confident would have cost me \$50 or \$60 had I purchased it here.

I have not had as satisfactory results, however, in buying from advertisers in other papers. Early this spring I purchased some nursery stock which did not turn out at all good. I ordered a bill of goods from a mail-order house, containing groceries, clothing, etc., and while the goods were what they claimed for them, after counting in the freight charges and other things, I found that I could have done about as well by patronizing my local merchant. In dealing with mail-order houses it takes the cash, while with the local merchant we can exchange our poultry, eggs, produce and fruit for goods and start a bank account with our money.

When the word "free" is too prominent in an advertisement, better leave it alone, as it is only a bait. There is nothing of intrinsic value that can be given away.

Many publications, and FARM AND FIRESIDE is one of them, guarantee to replace any loss sustained through dealing with their advertisers, and I would not patronize advertisers in papers who do not make such a guarantee unless I know them to be honest and reliable. It is a fact that money can be saved by buying certain things from an honest and responsible advertiser, but be sure that he is of that class before risking your money with him.

Illinois.

WM. H. UNDERWOOD.

### The Bees' Winter Stores

As soon as the flowers are killed by frost, or as soon as they cease to yield nectar naturally, I examine the brood-nests to ascertain the amount of stores present. Before opening a hive, however, it is lifted, and from previous experience I can often tell by this alone whether there is enough honey in the hive to carry the bees through the winter.

I estimate from fifteen to twenty pounds per colony when wintering in the cellar, and about ten pounds more when winter-

ing outdoors. If a colony has not the required amount, I give combs filled—and sealed—with honey taken from some other colony that has more than it needs. I am in a locality good for fall flows of honey, but occasionally there is not one colony that has more than its share, and many have less. When things are in this shape feeding sugar-syrup must be resorted to.

If sugar-syrup must be fed, it should be done early; for the bees must ripen the

some recommend is unnecessary. Moreover if one is not careful, and allows the sugar to burn, it will result in the bees contracting dysentery and dying long before the winter is over.

There are several kinds of good feeders sold by bee-supply dealers, but for those not having many colonies, homemade ones will be just as good. The best homemade feeders that I have used were glass fruit cans. Old can covers were

row in the fall of the year. It pulverizes the soil better and puts it in shape to retain the most essential elements of the winter precipitation. The great feature lies in the fact that it prepares in advance the seed-bed so that little work will be needed when planting-time comes. The man in any community who will use a harrow frequently will become a philanthropist, so to speak, for he will feed three, his hungry neighbor, himself and another. This will come about because so many will see the advantages growing out of the use of a harrow that others will take up the work.

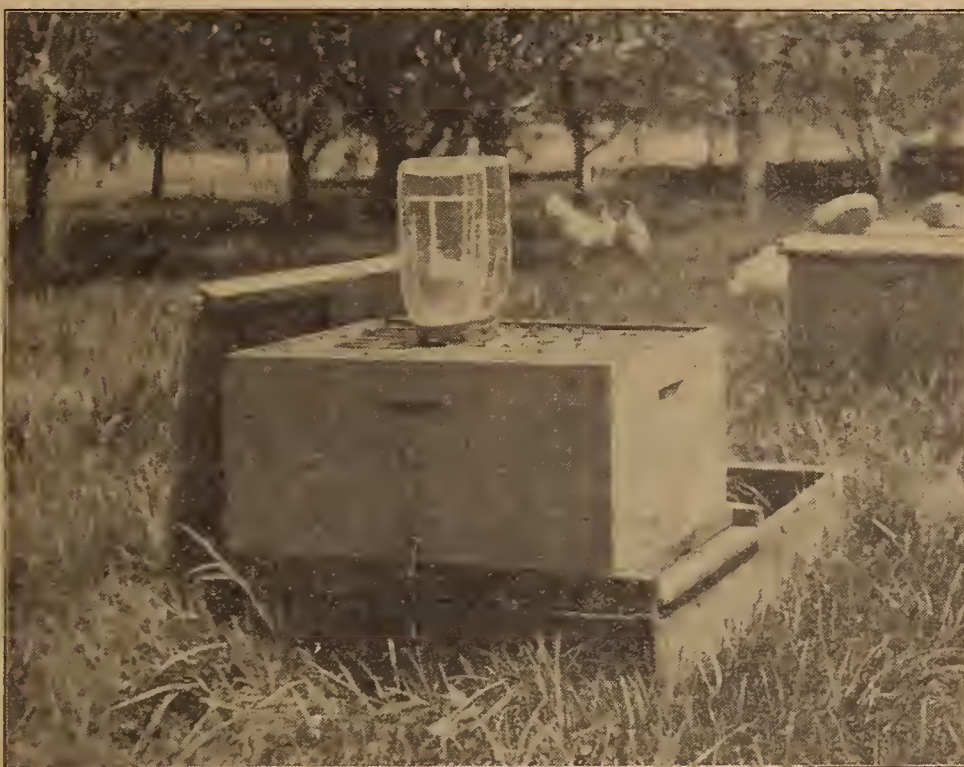
It is one of the surest ways to advance the farming interests of any community if the people will take up the use of the harrow. There is nothing that adds so much to appearances of fields as harrowing, and nothing adds such an increase to the yield at half so low a cost. In the way of preparation there can hardly be too much work done on a plat of land, and the farmer who sees it this way will surely succeed. Preparation means half of the crop, and more than that if the farmer has not plenty of labor to work it after it comes up and goes to growing.

In the case of winter crops, in nearly every instance, it is almost impossible to work them, and therefore the preparation should be thorough in every detail. Oats and wheat can do but little unless put in in a good seed-bed, and that is one of the reasons why the farmers of many sections do not make more grain. This is especially true in the South, where the use of improved implements is so little known.

If the farmers will go to work and put in half the acreage in winter oats and wheat, apply twice the amount of fertilizers, and give it twice as much preparation, they will receive twice as much profit from the transaction. In addition to this the land will be undergoing an improvement constantly, which adds value to the farm. One farmer of my acquaintance bought an old so-called worn-out farm ten years ago, and he used one of the first harrows ever brought to the country. He gave a certain limited acreage good preparation and fertilization, gradually broadening out, and to-day his farm is worth five times as much as those around him.

Georgia.

J. C. McAULIFFE.



FRUIT-JAR BEE-FEEDER

syrup if it is to make good winter stores. If the feeding is done any time during September, equal parts of sugar and water will be better than a thicker syrup. To every twenty-five pounds of syrup about five pounds of liquid honey must be added. I say must, for if it is not added the syrup may candy (semi-solidify) in the combs in winter, in which condition it cannot be used by the bees.

I prefer warm water, as it dissolves the sugar sooner; but cooking the syrup as

punched full of holes, after the porcelain or glass lining was removed, and through these the bees took the syrup, the cans being inverted and set on two small sticks on the top of the brood frames, in an upper story. Can rubbers should also be used to prevent leakage.

Wisconsin.

F. A. STROCHEIN.

### Using the Harrow in the Fall

The secret of successful grain and hay culture lies in the liberal use of the har-



THIRTY CULTIVATORS AT WORK IN A FOUR-HUNDRED-ACRE FIELD OF SWEET CORN, NEAR HOOPESTOWN, ILLINOIS



# FARM AND FIRESIDE

PUBLISHED BY  
THE CROWELL PUBLISHING CO.  
SPRINGFIELD, OHIO

Subscriptions and all editorial letters should be sent to the offices at Springfield, Ohio, and letters for the Editor should be marked "Editor."  
Letters regarding advertising should be sent to the New York address.

BRANCH OFFICES:  
11 East 24th Street NEW YORK CITY  
Tribune Building CHICAGO

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The Date on the "yellow label" shows the time to which each subscriber has paid. Thus: April, 1906, means that the subscription is paid up to, and includes the April 15th issue; May, 1906, means up to and including May 15th issue, and so on. All your subscription begins with February it will end with next January 15th, which gives just twelve months.

The above rate includes the payment of postage by us. All subscriptions commence with the issue on press when the order is received.

Subscribers receive this paper twice a month, which is twice as often as most other farm and poultry journals are issued.

Payment, when sent by mail, should be made in Express or Post Office Money Orders, Bank Checks or Drafts. When none of these can be procured, send the money in a registered letter. All postmasters are required to register letters whenever requested to do so. Do not send checks on banks in small towns.

Silver, when sent through the mail, should be carefully wrapped in cloth or strong paper, so as not to wear a hole through the envelope and get lost.

Postage Stamps will be received in payment for subscriptions in sums less than one dollar if for every 25 cents in stamps you add a one-cent stamp extra, as we must sell postage stamps at a loss.

When money is received, the date will be changed within four weeks, so that the label will answer for a receipt.

When renewing your subscription, do not fail to say it is a renewal. If all our subscribers will do this a great deal of trouble will be avoided. Also give your name and initials just as now on the yellow address label; don't change it to some other member of the family; if the paper is now coming in your wife's name, sign her name, just as it is on the label, to your letter of renewal.

Discontinuances.—Subscribers wishing their paper discontinued should write us to that effect and pay up all their arrearages. If this is not done, it is assumed that the subscriber wishes the paper continued and intends to pay when convenient.

Always give your post office at the beginning of your letter.

## About Advertisements

FARM AND FIRESIDE does not print advertisements generally known as "readers" in its editorial or news columns.

Mention FARM AND FIRESIDE when you write to our advertisers, and we guarantee you fair and square treatment.

Of course we do not undertake to adjust petty differences between subscribers and honest advertisers, but if any advertiser should defraud a subscriber, we stand ready to make good the loss incurred, provided we are notified within thirty days after the transaction.

## Comment

### The Parcels-Post

POSTAL reform will very likely be one of the important measures to be considered by the Congress to be elected this fall. It is an old subject, but the people are becoming more and more interested in it, and it is now one of the live issues of the day.

There is an advantage in getting different views of the same question, and proper discussion clears up doubtful points. In presenting an objection, a Missouri subscriber writes:

In an article on the parcels-post in FARM AND FIRESIDE reference is made to "our deficiency-making, puerile management of postal affairs." How would the deficit in the Post-office Department be lessened by a parcels-post? The fact is it would be greatly increased.

Our government is paying the railroad companies for carrying the mails \$8 a hundred-weight, the average distance traveled by a piece of mail being four hundred miles, while the express rates on merchandise for greater distances is from \$1.50 to \$2 a hundred-weight. By this we see that our government makes a present of over thirty-three million dollars each year to the railroads, for we pay them that much in excess of a reasonable compensation for carrying the mail.

Suppose we get parcels-post and are charged such excessive rates for parcels as we are for mail, how will we meet the deficiency then?

Of course, under the supposition, the deficiency will be greater than ever before, but the answer to the objection is that if we get genuine postal reform, including the parcels-post, there will be reasonable rates for both mail and parcels.

In a personal letter a friend presents a broad and interesting view of the subject. He says:

You are, of course, interested in postal reform, particularly parcels-post, which will benefit not only every farmer in the country, but every advertiser, as well as storekeeper.

In order to frighten off postal reform the express companies have used the little country store-keeper as a cat's-paw, and frightened members of Congress by telling them this would take away their constituents' business, etc. This is a great bugaboo, and I think I can show you why it is in a few words.

Mr. James J. Hill, of the Great Northern Railroad, says—his freight rates are as high as they are because his freight cars stand idle five days out of six, and for these reasons: A manufacturer asks for a freight car to make a shipment. The car may be ready for him the following day, when he is notified. It stands there perhaps a day, or perhaps two days, before he commences to load. It may take him a day, or perhaps two days, to load. All these delays eat up the profits of each car, and compel a higher rate than would be necessary if we had a parcels-post.

This car-load of goods goes to a big jobbing-house, and, of course, they take their time in unpacking it. They then have orders from other small jobbers or wholesalers to fill from this shipment, and it takes time to fill these various orders. After the wholesalers or small jobbers get hold of their share of this first shipment, they, in turn, send it around to the country stores to fill their orders. You see all the handling that is necessary, and the delays occasioned thereby.

Now if the manufacturer could only ship his goods by parcels-post, at one tenth or less the present total rates of sixteen cents a pound, instead of waiting to get a car, he would simply do up his goods hour by hour, and they would leave his town train by train, instead of waiting to fill up one car. And these goods would not go to the jobber and then go through the distributions as above outlined, but each package would be shipped on order of the jobber direct to the little store-keeper, thus saving a great deal of handling by all these people.

The little store-keeper, instead of having to carry a big stock of goods, some of which lies on his shelves for years, could order fresh goods often, and order when and what he wanted for any particular occasion, and get his goods much quicker. In fact, the country dealer could do double his business and carry half the stock he now carries, all of which would mean more than double profits.

### The Spencer Seedless Apple

From Mr. C. P. Fell, Secretary of the Spencer Seedless Apple Company, of New York, we have received the following:

We notice an article in your issue of July 15th, copied from the "Rural New-Yorker" entitled "Another Seedless Scheme," and in justice to ourselves are inclined to volunteer an explanation of the matter referred to, which we trust may serve to correct any false impression which you or your readers may have regarding the same.

Ours is one of sixteen subsidiary companies of the Spencer Seedless Apple Company, organized in the various apple-growing states to propagate and distribute general nursery stock as well as the products developed by John F. Spencer, of Colorado, which include the seedless-apple tree bearing his name. The printed matter, such as stationery, catalogues, etc., of the various sub-companies are naturally very similar, each of them compiling their matter as far as possible from one standard form. In compiling our catalogues the seedless grape, which is the subject of the aforesaid article, was inadvertently included by the party who had this work in charge, and was not discovered by us until a few copies had been printed and gone out. Upon discovering this description in our catalogue it was stricken out and the balance of our catalogues printed with the description omitted, as you will see from the catalogue which we enclose herewith, and so far as possible the old ones which had gone out were called in.

This grape is being sold by some of our western sub-companies who are doing business in the inter-mountain territory of the United States where it can be successfully grown, but as it is not adapted to our particular territory we are accepting no orders for the vines, and what inquiries or orders have been received by us as a result of its description appearing in our catalogue we have returned to the senders with the explanation given above.

The sub-company, of which Mr. Fell is secretary, is to be commended for its action in withdrawing the Seedless Sultana grape from sale in its territory—New York, New England and New Jersey. The description stricken out of its catalogue reads as follows:

#### SEEDLESS SULTANA

This new and absolutely seedless grape can now be successfully grown in our climate. Good size, rich, sweet flavor, very prolific and a strong grower.

Write us for full particulars as to method of propagating this new and remarkable variety.

The Seedless Sultana is an old foreign variety that has been grown in California for many years past. The price there for cuttings is \$3 to \$4 a thousand instead of \$1 each, the extortionate price listed in the Spencer catalogue. Now we would like to know if the fifteen other sub-companies and the foster-mother Spencer Seedless Apple Company of Colorado have withdrawn the false claim that the Seedless Sultana is a new variety and the implied claim that it is one of Mr. Spencer's products. Until they do, no well-informed fruit grower can have a particle of confidence in the business methods of this great 16 in 1 seedless nursery scheme. To put the case squarely: Does not offering the Seedless Sultana grape at \$1 a cutting under the claim that it is a new variety look very much like an attempt to obtain money under false pretenses?

In so far as the Seedless Sultana grape is concerned, it will be well for fruit growers to listen to Prof. H. E. Van Deman. He does not advise anyone to plant it east of New Mexico and Utah, and says that rooted plants, worth far more than cuttings, can be obtained for less than 25 cents each, delivered post-paid to any address.

If we have been correctly informed, under its plan of organization, the parent Spencer Seedless Apple Company holds fifty-one per cent of the stock in the subordinate companies formed in different parts of the country to propagate and sell the Spencer seedless apples at \$2 each. And we understand that millions of young trees are now growing in various subsidiary nurseries. The plan, of course, is to retain control of the nursery stock and get the cream of the market by selling trees at novelty prices all over the apple-growing territory of the United States at the same time. There's millions in it, maybe.

As to the Spencer Seedless apple itself, it is in dispute. It is claimed by some to be a new variety of quality equal to the Baldwin; by others it is claimed to be one of the numerous old seedless apples under a new name, and that its quality is not as good as that of a poor Ben Davis. Until the questions about its novelty and quality are settled, we see no reason why farmers should pay \$2 each for the trees.

After a year or two, if there is then any demand for the Spencer Seedless, the price will fall to standard rates. Farmers will lose nothing by waiting a while.

In spite of the vast amount of free advertising given to the Spencer Seedless, the business seems now to have reached the critical stage. If it should turn out that the apple itself lacks both novelty and quality, either the farmers who buy the trees or the local investors in the subordinate companies must hold the bag.

In the August 25th issue of the "Rural New-Yorker," Prof. H. E. Van Deman, one of the best horticultural authorities in the United States gives evidence to prove that the Spencer Seedless is merely an old seedling of little merit. In conclusion he says:

The sum and substance of this whole affair is about this: There is a company vigorously pushing the sale of a variety of apple that from my observation seems worthless, except it might be for cider, and it is not really needed for that purpose. They have made claims for it that are not borne out by the facts. It is neither coreless, seedless nor wormless. The price they ask for the trees, \$2 each, is enormous, being more than ten times the price of really good apple trees. The public ought to know the facts in the case, and that is why those of us who know some of them should tell them.

J. B. Barnett.

### Are We Too Optimistic?

IT is true that those who advocated "free denaturated alcohol" claimed, and still expect, and also that the monopolistic interests who opposed it, feared great things from it. It is stated that a bushel of corn makes nearly three gallons of alcohol, with a residue left of some value for stock food, so that the cost per gallon would range between fifteen and twenty cents. As to its character and uses, an expert says:

Alcohol when burned in an incandescent-mantle lamp gives a clear, brilliant, wholesome and efficient light at a cost of one half cent for thirty candle-power per hour. No wick is used, as the combustion of the vapor is regulated easily by a little valve, and the light may be turned down low for the sick-room or burned at its utmost brilliancy. The burner of such a lamp will fit any ordinary kerosene lamp.

As alcohol mixes with water, a fire started by an accident is easily put out. This is not the case with either kerosene or gasoline, where water merely increases the danger by scattering the fire.

For purposes of heating and cooking denaturated alcohol is most admirably adapted. It can compete with coal for the heating of rooms, halls, etc., and there is no waste of heat nor unwholesome vapors or gases. It is far cleaner to use, there being no ashes. When the alcohol heater is shut off, that ends the expense.

It is also stated that "artificial silk is easily made by means of alcohol from American cotton. Beautiful tapestries, furniture coverings, millinery and braids are thus made." A pound of cotton, worth say twelve cents, and one and one half gallons of alcohol, worth say thirty cents, an aggregate of forty-two cents, can thus be converted into silk worth now, even in the hank, \$1.50 a pound. This is the assertion.

If all these statements come anywhere near the truth, it will easily be seen what a boon we will have in this "free alcohol." But the millions that are in it for farmers may be especially found in the utilization of heretofore worthless or nearly worthless waste materials to be used for the manufacture of alcohol, such as inferior or partially decayed or spoiled grains, potatoes, fruits, vegetables, etc.

A California concern, the "Western Distillery Company," is already preparing to manufacture denatured alcohol from fruit wastes and fruit products not otherwise salable. The plant is to be located in Santa Clara County.

It is stated that alcohol can be made and sold at a cost of not over twenty cents a gallon, and that in heating or lighting it will go twice as far as gasoline. If this be true it would mean that after next January we will be able to procure the equivalent of a gallon of gasoline, for which the Standard Oil Company now asks me nineteen and one half cents a gallon by the barrel, for ten cents or less and it should really mean very formidable competition with the products of the Standard Oil octopus.

These views may be too optimistic; yet the prospects are decidedly pleasing, and the time when all this will be put to the test is fast approaching. It seems hardly fair, however, to saddle the cost of government inspection upon the manufacturers of "free" alcohol, when the meat packers so easily succeeded in saddling the cost of government inspection of their plants (and goodness knows how badly they needed inspection) upon the people at large.

### A Carnival of Graft

Wherever you look nowadays in public life, what a carnival of graft! The house-cleaning, however, has begun. Dishonest officials are being convicted and sent behind the bars. More of this is to come, and it is needed. Public opinion is still the power behind the throne in this country. I believe it was Cromwell who said: "Put your trust in God, my boys, and keep your powder dry." The modern version of it is: "Put your trust in (by nominating and electing) honest officials; but keep close watch on them!"

T. Greiner



About Rural Affairs

Danger in Delay

It is folly to talk about exterminating the San José scale where it has once taken a firm foothold. In many sections it is the pest of pests, and a danger of ever-increasing seriousness to the fruit-growing interests. It may be possible to check its spread by the regular spring treatment, but wherever the pest has become firmly established, and allowed to spread during the open season, treatments during summer and fall may be required to prevent serious injury to trees or shrubs. The experts, however, do not yet seem to be in full agreement in regard to the best means of fighting the scale. At my request, Prof. M. V. Slingerland, the "bugman," of Cornell, gave me the following:

"The safest treatment during summer for San José scale is kerosene emulsion, diluting it to twenty per cent kerosene. In fall or autumn I would (unless the case were a very severe infestation) wait until the leaves had dropped, then use either lime-sulphur wash or scalecide. Repeat the application again before growth begins in the spring. In a severe infestation I would spray once before the leaves dropped in fall with scalecide. Mr. Albert Wood, of Carleton Station, New York, followed this program last year and this spring, and thirty men have so far found no live scales this year. Success will depend entirely on the 'man behind the gun.' Only the most thorough kind of work will bring satisfactory results."

Prof. P. J. Parrott, entomologist of the New York State Experiment Station, at Geneva, New York, writes me as follows:

"As yet we have found no new remedy that has been conclusively proven to possess superior merits over known methods of treatment for the control of the San José scale, but we are experimenting with a combination of sprays which certainly have given very promising results. To forty-six gallons of the ordinary Bordeaux mixture, containing an arsenical poison, we are adding four gallons of concentrated-sulphur solution made by boiling sixteen pounds of air-slaked lime, sixteen pounds of sublimed flowers of sulphur and sixteen gallons of water. We are using air-slaked lime, as it is less caustic than live lime. The sulphur solution acts better in combination with the Bordeaux mixture, as it is safer to the foliage, and the two together form a thick coat of wash upon the twigs and leaves. In all our experimental orchards we are using this combined spray, having made from one to three applications up to the present time. Our experimental orchard, belonging to Mr. A. H. Dutton, of Youngstown, has shown the best results this summer of the three years that this orchard has been under our care.

"To those possessing only a few trees or a small orchard, and not having the appliances for preparing the Bordeaux mixture or the sulphur wash, this combined spray is, of course, not practicable. For the smaller orchards I would advise that whale-oil soap, at the rate of one pound dissolved in seven gallons of water, or kerosene emulsion diluted with seven parts water, or miscible oils in a three-per-cent solution be applied two or three times during the growing season at intervals of a week in order to hold the scale in check and to prevent its distribution in the orchard and the community. These sprays unfortunately destroy only at the time that application is made and have no effect afterward. The advantage derived from the use of sulphur washes is that they possess insecticidal qualities long after the time of application."

The existing conditions in this and many other regions call for prompt action. There is danger in delay.

The Farm-Labor Problem

In the centers of industrial activity, as in my own vicinity and in many other localities, the problem of how to get reliable farm labor is especially puzzling. I fail to see that there is much profit left for me if I have to pay \$30 and board to a young man who just wants to work his nine, or at most ten, hours a day, and has no other interest at heart than to draw his pay, to say nothing of the risks and inconveniences of having persons of uncertain habits about the house and associating with members of the family. Really good men, such as give us fairly good service, and as one would like to have around, and with whom one would

feel perfectly safe, are very hard to get for farm-work at any price. Yet the cities near the immigration centers are well filled with people who are either "out of a job," or working for small wages at jobs not half as pleasant as farm-work, and who could easily be trained to become good "hands" on the farm. A Buffalo evening paper, referring to the fact that many of the new immigrants in New York and other seaports are absolutely helpless after arrival, and left a prey to all sorts of schemers and plunderers, says:

"The immigration problem opens a new field for official functions. The immigrant should not be left wholly to his own devices after he has once passed the inspection ordeal. His future should not be committed to conscienceless speculators. Something ought to be done to guide him. Our authorities rest content with looking up his past. Why not also take his future into account? What is the use of shutting out a man because he is a criminal and admitting another man, who, through the conditions he has to meet, is bound to become one? If immigrants after their arrival were rightly told where to go and what to do, the unskilled labor market in our cities wouldn't be swamped and the Western farmers wouldn't have to send their wives and children into the fields to save the harvest drying up or rotting on the ground for lack of help."

Sometimes industrial and social conditions change very suddenly and give a wholly different aspect to things in a very short time. Yet as the conditions are to-day in our labor market, I can see no relief in sight for us in this section who wish to secure good farm help, except by means of directing the stream of desirable immigration Westward.

Farmer's Horn of Plenty

Just at this time nature overwhelms us with kindness. We have so many good things in the garden and orchard that it is a puzzle to make the selection for the daily meals. If an excessive meat diet is dangerous, we have nothing to fear from that source, since it is a long time since we have had to eat any of the packers' meats. With the exception of just a touch of nice, clean, home-grown pork with our green peas, and now and then a chicken, also home-grown, we have not had a piece of meat on the table for many weeks. In the place of it we have our peas, string-beans, lima-beans, sweet corn, tomatoes, eggplant, wholesome "dill pickles," with our new white mealy potatoes, fruits of all sorts, especially our daily dishes of luscious blackberries, and nice new apple-sauce or baked apples, milk and cream and butter that we know are clean; eggs, honey, etc. With eggs, fried eggplant, corn fritters, etc., in generous supply as a substitute for meat, the latter is not missed in the least. We have no mixtures of uncertain composition, no potted or canned stuff to which suspicion of any kind could attach. Personally we are not in any manner affected by the packing-house question. We receive our supplies almost wholly directly out of nature's hands, and, if we do our part, we can be absolutely sure that nothing unclean and unwholesome comes upon our table. What a fortunate position, for which the millionaires of the land have the best of reasons to envy us. The farmer was indeed born under a lucky star.

Alfalfa on Small Farms

I have had some experience with alfalfa, but unfortunately not as much as I would like. The trouble is that I do not have the right kind of land to grow it successfully. This land should be not only fairly productive, but also possessed of a porous subsoil. The deep, gravelly loams are just right for it. Whatever the big stock raiser may do (and if he knows what is good for him and has the right kind of soil, he will certainly have his alfalfa field or fields), I think that an alfalfa patch is just the thing for the man who tries to make the most of a few acres of land, and has to find feed for a horse and a cow or two. For the professional grower of garden stuff and small fruits, a fourth or half an acre or more of alfalfa seems to be an almost indispensable requisite. It produces more value in food than could be realized in any other way from the same area, and is exactly in line of the intensive culture which he must practise with his other crops.

Soil as Disinfectant

It is wonderful how quickly the soil will absorb, deodorize and make useful for plant growth even the foulest and strongest-smelling substances, such as night soil, fish or fish waste, spoiled meats, or the carcasses of smaller animals. Of any such materials, if not in large pieces or chunks, applied to the garden

in the spring, not a trace except the darker color of the soil remains after the ground has been repeatedly stirred with cultivator and hoe. The foulest night soil may be transformed into a nice and clean compost by piling it in alternate layers with damp earth, and afterward shoveling or spading it over a few times. An old neighbor of mine in New Jersey thus composted a few loads of rank-smelling fish, and applied the resulting odorless but rich compost to his tomatoes with the same effect as I obtained from hen manure on my lima beans.

The Layer of Layers

Mrs. C. C., a reader in Geauga County, Ohio, referring to what has been said about the Silver-Spangled Hamburg hen as a layer (FARM AND FIRESIDE of July 1st), writes:

I kept the Hamburgs a few years ago, and they were the best layers we ever had. There are only a few of them in this vicinity, and for lack of new blood my flock got run out. I have tried White and Brown Leghorns since, but in my opinion they do not come up to the Hamburgs.

I think she is right. For egg-producers, nothing can come up to or beat the Hamburgs and Polish.

*F. Grimes*  
\* \* \*

Salient Farm Notes

Good Little Garden

THE complaint of a farmer that he does not have time to grow a home-supply of vegetables reminds me of a mechanic, a wagon repairer, whom I know. This man lives in the suburbs of a small city, and works at his trade ten to fourteen hours a day, according to the quantity of work on hand. After his day's work is done he walks home, about three quarters of a mile. Back of his dwelling he has a lot fifty feet wide and one hundred long available for garden purposes, and the quantity of stuff he annually grows on that lot would, I think, surprise even an old professional gardener. He does all the work of attending to the garden after supper, and it seems to me he makes every stroke count for full value.

One summer some years ago there was a severe drought in that locality, and nearly all the gardens were destroyed, and with all his care he raised only about half a crop. The following winter, when work was slack, he erected a platform six feet high near his well. On this platform he placed a tank that holds twelve barrels of water, put a cheap frame about it, covered it with shiplap and put a roof on. From this tank to the end of the garden an iron pipe was laid about a foot deep in the ground. At the end it was brought up and turned over. A stop at the tank could be turned to let the water flow into the pipe. A force-pump was put in the well and with this he could fill the tank, pumping about two barrels each morning before breakfast.

Whenever the garden, or any part of it, needed water it would be turned into the little furrow at the head and then guided to the part needing irrigation. Celery and other vegetables that need lots of water were planted nearest the water. The two rows of strawberries about the center of the garden had a little furrow between them, into which water was turned every evening when the weather was the least bit dry. He and his wife and family of three children had all the vegetables and strawberries they could eat all through the season, and the surplus brought enough to pay the entire cost of the irrigating plant. The third year after he put in the "plant" there was another drought which cut the supply of vegetables and fruit down to nearly nothing in all the gardens in the locality, but our friend had a bumper crop of all kinds, and his surplus brought him over a hundred dollars, I think he said over a hundred and fifty.

One who has never seen a little bit of land worked to its full capacity can scarcely believe what a large quantity of stuff can be grown on it. A farmer who owns about two hundred acres of land once told me that he had an acre of garden, and that he did not think it produced him over ten dollars' worth of stuff. He said he did not have time to cultivate it as it should be probably, and it raised more weeds than anything else. I told

him about this man's little plot, and asked him if he did not think he had too much land in his garden. The following autumn he plowed up what had for years been a cow-yard near his barn. Plowed it three times, running his plow twelve inches deep the last time. Then he put up a tank-house near his barn well, which had a windmill over it, connected the pump with the tank, which was set eight feet above the ground, ran a pipe to the end of his garden and declared he would show the neighbors how to grow garden stuff. And he did. He had to irrigate only three times during the season, and he had prize vegetables of all kinds. One of the secrets of his success lay in the fact that he took so much pride in the size and quality of his vegetables that he kept the soil well cultivated and every weed out. He set a row of raspberries along the fence, and when they came into bearing they were a sight to behold, being fairly loaded with the largest-sized fruit, and his matted row of strawberries running the length of the garden yielded so heavily that he said he believed he'd missed his calling and should have been a fruit grower. The fourth year he turned the garden over to his little twelve-year-old girl, and told her she could have all that the family did not need for the table. He did all the plowing and other heavy work and she did the weeding, hoeing, thinning, gathering and other light work, and took to town all that was not required for home use. She "farmed" it five years and put something over two hundred dollars in the bank. He often declared that the little garden had taught him how to farm to so much better advantage that he believed his profits had increased one third five years after he became a gardener.

A Good Little Farm

He said it had been his firm belief that no man could make any money farming on less than a hundred acres. He now believes that forty acres is ample for nine out of ten farmers. If they would work that much land right they would have more money at the end of the year than they would with twice the amount of land. It is a fact that many farmers are land poor, and are unable to farm it right because they have too much. But there are also thousands who farm poorly, whether they have much or little. So many farmers who have a small farm, which they could work nicely if they would, go miles to rent more land to half farm like they do their own. A great many farmers think they must add to the number of their acres as the land becomes poorer and produces less. Instead of bringing their land up—increasing its fertility until it will produce as much, or more than it did when first broken up, with a clover rotation, they go aimlessly on in the same old rut, and lots of them end up as day laborers in town. I wish I could induce some thousands of these farmers to thoroughly fertilize and farm one acre and see what it will yield. Farm it in the best manner possible two years and see what can be gotten out of it.

Last year a man who farms fifty acres told me that he had grown two hundred and twenty bushels of corn on three acres, and his neighbor just across the road grew sixty-one bushels on three acres. The previous year he had grown a crop of cow-peas on his three acres, then emptied the barnyard onto it, tilled the land well, planted perfect seed and got a full stand, cultivated it six times and kept every weed out. His neighbor had corn on his the previous year, plowed it, planted the seed and cultivated about as the average farmer does. The neighbor declared that his land could not be made to yield a crop like the fifty-acre farmer grew. Under the direction of the latter he tried one acre by way of experiment. He called it "gardening corn." The acre yielded sixty-eight bushels of fine corn. He was astonished. That one experiment made him an intensive farmer, and I once heard him say: "These fellers that raise only twenty or thirty bushels of corn to the acre make me tired. If they'd only handle their land like I do mine they would get more than double that!"

Another farmer who was looking through the fine fields of corn belonging to these two men remarked: "If I could spare the time to work a small patch of five or ten acres like these men have I believe I could grow quite as many bushels to the acre. But my farm is too large to permit of it. I grow about seventy acres of corn each year." The fifty-acre farmer asked him what his average yield was. "Between thirty and forty bushels," he replied. "Well," said the other, "are you farming for crops, or to see how much land you can run over each season?"

*Fred Grundy*



## The Corn Crop

ALL HAIL KING CORN! LONG LIVE THE KING!

LAST year our makers of statistics told us we produced our record crop of corn. This year they tell us we are making a new record. This is very encouraging, for it denotes progress. It shows that we are doing better, but by no means have we reached the limit.

While it is a fact that there does not now remain in this country vast areas of new land which may be made available for extensive corn growing, it is a fact the country's average yield per acre can be doubled, and our doing better this year than we did last is a promise of our doing surprisingly better in the future.

The fact that a hundred and twenty-five bushels of shelled corn to the acre is not an uncommon yield for some of our most careful corn growers, and that, too, where it is extensively grown in regular farm rotations, indicates the wide possibilities of bringing sensibly upward the present general average of less than thirty bushels an acre.

Appreciating the possible increase of which our present marvelous corn crop is capable gives us very reasonable assurance that the day when our limit shall be reached is very far distant indeed. The time is remote when our nation and the nations of the earth outside ourselves shall not be pretty liberally corn fed.

At present, however, consumption of corn is keeping quite close up to production. Right in the face of our recent immense crops, we have had no surplus to break the market prices, so that for the grower corn is one of the most profitable crops, and for the feeder a very expensive one. A feed like any other marketable commodity, costs the feeder just as much as it will sell for. My local market for corn at this writing is sixty cents a bushel, consequently when I feed my own corn to any of my animals I am feeding sixty-cent corn, quite an expensive feed, unless I am very careful to feed it only to such animals as have the individual ability to make me a full profit return at current market prices for their product.

This aspect of the case opens a question in animal feeding scarcely germane to my topic, but of so natural an outgrowth that it may be noticed briefly.

The present price of butter is twenty-five cents a pound; of eggs twenty cents a dozen; of pork eight cents a pound. Now, there are cows and chickens and pigs that under the best conditions of feeding and care will not pay for corn at sixty cents a bushel. There are horses that by the work they do will not pay for the sixty-cent corn they eat. Again, there are animals in all these breeds that would pay for the corn if they could get it, and others that are getting it and not paying for it by reason of the lack of intelligent feeding.

It is safe to assume that if corn was cheaper, animal products would be lower in price, also; so that the obvious and logical conclusion must be that we who grow and feed or buy and feed any grain or any other feed to any animal shall first definitely determine whether that animal, under proper management, shall return us a margin over cost.

It is said that analysis shows that the stover of the corn plant carries as much feeding value as the ear. We practical feeders have no reason to question the chemical accuracy of this finding, but when brought to the final analysis, the ability of the animal to prove the work of the chemist, it is not likely that the stover will be classed with the grain. The actual nutritive elements are no doubt contained in the stover, but the animal cannot recover them as from the more refined character and combination of them in the corn.

This is a great point in our estimate of any feed—the availability of the matter it may contain. The chemist can tell us just what elements are there, but the usability of them for an animal must be determined by the consuming individual.

Corn stover at its best is very much more valuable property than corn stover at its worst, and to too many farmers a bundle of stover is always a bundle of fodder. Naturally, when the ear of the stalk is at its best stage for curing the fodder of the plant is also, and careful farmers will know that corn cut and shocked at the earliest day the grain reaches the proper degree of ripeness, has a quality of stover as far above the old, ripened, wind-blown, rain-washed stover of the neglected corn-fields as good clover hay is above and beyond oats straw.

Stover from corn cut thus early and afterward carefully cared for is the only kind from which it is possible for the feeder to approximately realize the findings of the chemist.

In any forage allowed to overripen and remain exposed to the weather, the feeding elements most easily recoverable by

## Farmers' Correspondence Club

the animal are wasted first, so that in the final consumption of the deteriorated fodder the animal in eating it does the most labor for the least compensation.

The best corn stover is made when the plant is cut and carefully shocked while the blades and stalks have yet considerable green. This will cure beautifully in the shock, retaining a maximum of feeding value reinforced by a fine flavor and aroma very grateful to the animal, and consequently profitable to the feeder. As soon as the ears are sufficiently cured for storing, husking should begin, and the stover be tied into convenient bundles and be well set up in large shocks till it can be hauled to the barn for storage or stacking. My experience has been that corn stover thus treated has a feeding value approximating good mixed hay, and at this time, when hay has a fair selling value, and is likely to have a decidedly greater one, owing to general shortness of the crop every ton of stover that can be used makes another ton of hay to be sold.

*W. F. McSparran*

\* \* \*

### To Get Best Yield of Potatoes

I plow my ground in the fall, cover with a good coat of manure, and let it lie till spring. By this time all the liquid has filtered into the ground. In the spring I plow again and lay the ground off in rows three feet apart with a turning plow after the ground is worked thoroughly. I plant the potatoes one foot apart in the row. The tops will shade the ground. I practise level culture. No irrigation at all.

Oregon.

A. MATHES.

### Applying Fertilizer to Wheat

My experience with fertilizer on wheat in the past is that a very heavy application does not pay. About two hundred pounds per acre is as much as is profitable for wheat, and as a rule an application of a good-grade superphosphate gives better results and is more profitable than any of the complete fertilizers.

I apply the fertilizer with a common wheat-drill as I sow the wheat. I have tried sowing the fertilizer by hand, broadcast, but it does not do so well as when drilled in with the wheat.

A few years ago I noted two fields of wheat grown on a neighbor's farm the same year. The soil was about the same in both fields. One was fertilized with a good grade of superphosphate, two hundred pounds to the acre, costing seventeen dollars a ton. The other was fertilized with a so-called complete fertilizer, costing about twenty-two dollars a ton, at the rate of two hundred pounds per acre. The field fertilized with the superphosphate was considerably the best wheat. I have noticed that as a rule the wheat fertilized with a superphosphate, in this locality at least, gives better results for money invested than the wheat fertilized with the complete fertilizers.

West Virginia.

A. J. LEGG.

### Plant Trees!

Every man who owns land from ten acres upward should plant trees. Plant for ornament, plant for shade, plant for wind-break, plant because it will enhance the value of your farm, plant that your children may reap the benefit of your labor.

If it is necessary to allow stock to run where the trees are planted then it will be necessary to protect trees for a few years. If you have only room for a few trees, then I would advise you to plant fruit trees, and if possible plant them west and north of your buildings. They will perform double service; do duty as a wind-break and give you some fruit.

Some farms near streams have a few acres of woodland. Never cut it all off. Thin it out, cutting crooked and undesirable trees. In time that plot of woodland will be worth as much or more than the acres that have been cultivated. Most farms have a highway on the side or across one end, and a row of trees might be planted near the fence. Sometimes there is a corner of the farm that cannot be cultivated for some reason, and this could be made of value to the farm if planted in trees.

Plant some quick-growing trees and some of the slower growth, alternating them. The trees of quick growth could be cut as needed, and the others would

then have more light and air, also more room for the roots and would grow faster, while you would have the cut trees to use for firewood or many other purposes. Soft maple and silver-leafed maple make rapid growth, and make good fire-wood. White or gray willow is a very quick-growing tree, and in the absence of better post material, will last longer used for posts than one would expect. Black cherry is of fairly quick growth, and is a valuable tree when it obtains a diameter of six inches and upward. Linden is a handsome tree; is eagerly sought by bees, makes good summer wood, but is most too soft for any commercial value. The pioneers were glad to get it, for they could make troughs of it to feed stock or to catch maple sap in, and also to make small ox yokes to use when they wanted to "break" yearlings to drive. Cottonwood also is a fairly quick-growing tree, but I could never find it of much value. At present there is some demand for it at piano factories. My dislike for it may be caused by the pounding on wedges I have done in my younger days in attempting to split it into firewood. Catalpa is a medium-growing tree in regard to time, and, if half the stories told of its lasting qualities are true, it would be a sound post when the metal used to fasten your fence on with, staples, nails, etc., would all have decomposed in rust.

Plant locusts, too; they last thirty to thirty-five years for posts, and make good firewood when the bottom of the post has decayed. In Ohio and Eastern states plant some chestnuts. Osage Orange makes the best fence of all in states where the cold winters do not kill it out and, if you can let it stand some years without cutting it, also makes good, lasting posts. Be sure to plant black walnut. That lumber is exceedingly valuable now, and the nuts are valuable also. I have some trees that my brother and I planted by the roadside thirty-nine years ago. They never had any cultivation and to-day some of them are two feet in diameter. With a little cultivation they would be larger. Concrete posts may be used altogether in a few years, but the trees are valuable for shade, ornament, firewood and for wind-breaks.

Illinois.

U. S. ELLSWORTH.

### A Walking-Plow Talk

It frequently happens in farming communities around small towns that one particular make of plow is almost universally used, usually because the local dealer handles it exclusively, or it is adapted to that particular kind of soil. It invariably is the case with all makes that about one out of six fails to give entire satisfaction and is a source of considerable annoyance.

There are few old farmers but who have had a plow that didn't run right. If the plow is well guaranteed the farmer returns it to the dealer and tries another. If the dealer is obstinate, the plow gets dumped into the scrap-heap or continues to give dissatisfaction until the plow-boy steers it into a friendly stump.

Now all plows are made after a model that works to perfection. Each piece is intended to be an exact duplicate of the corresponding part of the perfect plow. But the people who manufacture plows are not doing it for the pleasure they take in turning out perfect goods. They find it a source of profit to employ cheap labor wherever they can, usually boys and foreigners who, under the stress of competition, are overworked to a point that results in carelessness. Ofttimes the piece-work system, which is synonymous for poor work, is used.

The iron parts being harder to make and more expensive receive more care, and by far the greater part of mistakes are made boring holes in the handles and beam. Let the bolt holes for the handle brace to which the beam is attached be one eighth to one fourth of an inch too low or high, and the plow will run in a twist. The same error in the distance between the bolt holes in the rear of the beam and the standard bolt will cause the plow to run unsteady, and require a wheel, a device no good plow needs or is benefited by.

And now for the remedy. When the new plow will not run good with careful adjusting of both ends of the beam, place it on a level floor or long board and carefully make and notate the following measurements: Distance of center of handle-brace bolts to center of bolts in land-side and mold-board; from

rear-beam bolt to standard bolt; from standard bolt to clevis bolt, and same from tip of point perpendicular to beam. When this is done take your measurements to a neighbor's plow that is known to be all right or to the dealer's sample plow, and find wherein lies the trouble. Most of the difficulties can be remedied with a brace and bit in a few minutes, or any dealer will replace a defective part.

This may seem like going to a lot of trouble when the plow is guaranteed, but then it is trouble to take it back and get another with no assurance of it being any better.

Indiana.

G. E. REA.

### Successful Wheat Growing

First of all we must secure the very best seed. It matters but little whether it be bearded or smooth. I prefer to sow the smooth, as it is much nicer to handle and gives me as big a yield as the bearded.

Do not be satisfied with sowing wheat as it comes from the thrashing-machine, but reclean every grain of it. When you are sowing dirt, straw, weed-sticks and swiveled wheat, you are not putting wheat in the ground.

Some will say a bushel is plenty to sow to the acre, but I would say not. In good land and under favorable circumstances you will raise more bushels to the acre by sowing two bushels per acre than by sowing only one. In our latitude some is sure to freeze out, and some will be killed by insects.

Does it pay to fertilize? Would you prefer twelve to twenty bushels per acre not fertilized, or twenty-five to forty fertilized, where you spend seventy cents to one dollar for fertilizer?

Get a good fertilizer with plenty of phosphoric acid to produce the berry. We sow one to two hundred pounds per acre, according to the fertility of the soil.

Before sowing get the top of your ground in a good condition, so as not to get it sowed too deep, and in getting it covered that it may all get up about the same time.

We must sow it in time to give it a start for winter, any time, in the month of September, but preferably the latter half. Should there happen to be any fly it could not work on it so much.

Great care should be taken in sowing all the ground. It is discouraging to see a field with a strip the width of one hoe missed across the field, or sometimes the width of the drill. Always keep wheat in your drill, and don't be careless.

Most of us think we are through when we pull the drill from the field. We are not, for then comes the manure-spreader. One of these should be on every farm. Give the wheat a thin covering of stable manure. If there isn't enough manure on the farm, we will be more than doubly paid for our time and trouble if we haul from a livery, if not too far away. This manure is just what you want, as it will not cause your wheat to grow so rank as to fall down, and at the same time protect your wheat from the winter.

Ohio.

E. W. DOUGLAS.

### To Kill Canada Thistle

First, plant the land where the thistles are in corn, and cultivate as usual.

Second, once every two weeks from June 1st to December 1st, follow each corn row and hoe up the thistles, using the corner of a sharp hoe, striking the ground so as to grub out about two inches of the root. Should any dirt cling to the root knock it off with the hoe. Don't let a single thistle escape the hoe. In this way I destroyed a half-acre patch of Canada thistles.

You can treat the thistles this way if the land is not in corn, as the only purpose of the corn is to make the job easier.

Ohio.

M. E. WOODBURY.

### Farm News Notes

The leading honey-producing counties of Missouri are Cass, New Madrid and Gentry. Sorghum leads in Jackson, Linn and Jasper.

Fifteen years ago but 500,000 barrels of cement was used in the United States. This year nearly sixty times as much will be required.

The Keokuk (Iowa) Canning Company are reported to have not less than 2,000 acres of tomatoes in one field. A crop of 60,000 bushels is anticipated.

After the oil is expressed from the castor-bean, the pomace or residue is now much used in France as a fertilizer for the growing of garden vegetables.

Fresno, California, is known as the Raisin City. It is the center of a section which produces about two thirds of the raisin crop of the state.



### Grinding Feed

IN THE "National Stockman and Farmer," L. W. Lightly gives some good reasons for grinding feed at home. He says:

It costs me \$3.50 or more per ton to have my grain ground, not counting the lugging to mill and back, and that added to the price of grain makes it more expensive than many feeds on the market." Thus argues a reader against home-grown feeds, but from the letter I suspect he is more interested in selling feeds than in feeding them to the cows and making his money as a dairyman. It is true that the corn and oats should be ground for the cow and that it costs something to do this. There are different ways to do things; some people choose the most difficult and expensive. I prefer the reverse if results obtained are the same. Why "lug" the grain to the mill and back when it is so much easier and cheaper to "lug" the mill to the grain? When speaking of filling the silo I mentioned some of the reasons why a dairyman should own an engine, and right here is an important reason. With my little gasoline engine I can grind fifteen bushels an hour, using two quarts of gasoline. Grinding my grain costs me less than one dollar per ton.

#### WHY GRIND THE GRAIN?

Because it makes the feed more palatable and more digestible. As stated last week the more the animal relishes the feed the better it will be digested, but that is not all, the unbroken grain is surrounded by a layer of hard cellulose and lignin almost proof against the action of the digestive fluids, and if the animal fails to masticate the grain it will pass through the alimentary canal whole. Professor Henry says: "For hard-worked horses all the grain should be ground and the hay chaffed and mixed when fed. For idle horses the grain should not be ground and the hay and straw need not be chaffed. A cow yielding a large flow of milk should be regarded as a hard-working animal." Dr. Jordan says grinding the grain causes an increase in digestibility of from 33 per cent to 14 per cent. Professor Smith, looking at the matter no doubt from the old Western standpoint, doubts if it pays at all to grind the grain. But the careful, observing feeder knows that it pays to grind the grain for the dairy cow, and he also knows that the cow likes fresh-ground grain best. He noticed when he filled the bin with freshly ground grain that when he opened the lid the aroma was sweet and nutty, while later it became indifferent, and when it got a little old it took on a rancid and rather musty smell, hence it is advisable to grind little and often.

### How to Build Up a Profitable Herd

The following good advice is from "Hoard's Dairyman":

But few dairy farmers are fitted, by nature and training, to handle a pure-bred herd. Although the profits from the registered calves, as well as the milk, are much greater, yet it requires a man who is exact and methodical to keep track of everything; to sketch, register and develop the progeny so as to insure profitable sales. But there is no reason in the world why any patron of a creamery or cheese factory should not enter upon the work of producing a first-class herd of cows. To do this he must first supply himself with a pure-bred, registered sire. Right here is where so many farmers fall down. They have never made a real, earnest study of the breeding question; their ideas are loose and hazy and they cannot see why a good-looking grade is not just as potent a sire as a pure-bred. So when a grade is offered at \$15 to \$25, and it will cost \$100 to buy a registered bull, they buy the grade and enter upon the work of breeding down the scale, rather than up.

Almost any fairly good cows will do as foundation stock on the female side. A record of some kind should be kept of the milk and butter-fat product of each cow. Then the owner can see clearly which of the cows are likely to produce the best heifers. Select, say, ten to fifteen of these heifers, always from the best cows, and start them right on the road to the making of good cows. So many farmers do not realize the importance of thorough care and generous feeding to a young heifer for the first year of her life, if they are to expect her to make a good cow. Our plan is to feed the heifer a regular daily ration of skim-milk until she is ten months to a year old, with a small ration of oats. Somehow this seems to develop her mammary organs and she gets a start that stays with her even if she is not well treated afterward. When she is eighteen to twenty months old breed

her to her sire, if she is a strong, vigorous animal. This will double the pure-bred blood in her heifer and make that heifer as responsive nearly to the influence of another pure-bred sire as if she had been a pure-bred herself. This is simply building both sides with the most desirable blood.

It is not only necessary to have good strong seed, but it is equally important to have the best and most responsive soil to plant it in. We have seen a herd of granddaughters of a bull bred in this way from his own daughters which averaged 357 pounds of butter per cow when the original mothers, the grandmothers, could not reach 200 pounds.

One should keep on in the line of the blood he starts with, in the after purchase of another sire. All over the land can be seen the broken and destructive effects of this mixed up cross-breeding so many farmers practise. Besides the breeding, the farmer should vigorously weed out all but the best cows. After a heifer has been tried for two years at the pail and does not come up to the right standard, dispose of her and put a better one in her place. Rigid selection is just as necessary as wise breeding. To this end we must keep a record and know what our cows are doing. This is the course that thousands of successful dairy farmers have pursued, and the road is open to all who will travel it.

### Making Sorghum Syrup

In the "Rural New-Yorker," Mr. Geo. Purdy gives his experience in making sorghum syrup:

Last year C. E. B. asked the "Rural New-Yorker" for some instructions in

holding up broom over pan the hot syrup will "rope" down twelve or fourteen inches without breaking, it is boiled enough and can be let out of back corner of pan into a trough, or better a tin coil through a barrel of cold water. As syrup flows out, let sap flow in through flood-gate. No hand skimming is necessary.

A horizontal roll mill is much easier to feed, and will pay big interest on first cost. Capacity will depend on speed of rolls and amount of power available. I would not suppose pomace to be of much value as feed, for the reason that the sugar content is nearly all extracted, and fermentation would be too great in silo, making it too sour. Syrup factory here (using 3,000 acres of cane annually) cuts stalks in inch lengths and cooks them in a steam tank with lime-and-sulphur treatment, then evaporates the water, but their syrup is not first class. "Clay filtering" is so easy, so cheap and simple, and success so sure, as I know from experience, that to try it is simply to wonder how we ever ate the old-fashioned, green, rank-tasting sorghum our "uncles" used to make.

### Eradicating Quack Grass

In "Wallaces' Farmer," N. Northey gives his experience in eradicating quack grass:

I bought a farm four years ago of a half section, that I suppose if the patches were all gathered up would make at least thirty acres of quack grass, scattered all over the farm.

To get rid of the quack grass I first put about thirty loads of manure, from the fat-cattle yard, to the acre, then plowed it shallow late in the fall, just before freezing up. In the spring I plowed it



PRIZE HOLSTEIN BULL

making sorghum syrup. Perhaps I may assist by giving some experience of my own. It has simplicity, cheapness and speed to its credit, and also quality second to none. I refer to the "yellow clay filtering process." I suppose common yellow clay is plentiful in Vermont, and as the inquirer is able to boil with steam nothing is lacking to make the finest quality of syrup. Get a "self-skimming evaporator," with a galvanized bottom of not less than one hundred and fifty gallons capacity for twelve hours. Make two juice vats to hold at least ten barrels each, with one faucet four inches above bottom and another half-way to top of vat. Set them high enough so that sap will flow into front end of evaporator. Put one bushel-basketful of common yellow clay into each vat, and fill with juice, stirring thoroughly. All sediment will settle to bottom of vat, and juice will flow from faucet as clear as water in ten minutes. After draining vat by the faucets into the evaporator, wash out vat with water and refill as before. Drain off second vat while refilling first one. Never let sap stand in vat over night. Evaporator should have at least three divisions with a little flood-gate to each to keep separate raw juice, half-boiled juice and syrup in finishing pan. Stir syrup in finishing pan constantly; use a new broom if nothing better is at hand, and likely there will not be. When, by

deep and in several cases before plowing put about twenty loads of manure to the acre. Planted my corn and before plowing the corn the first time I hoed the quack grass out of the hills only. I did not need to hoe it any more, as the corn would grow so vigorously from being so well manured that you could plow the corn and kill the quack grass without plowing the corn up.

In the fall of the year we cut our corn with the corn harvester and are careful to carry the bundles of corn off of the quack-grass patches. Then we plow the quack-grass patches shallow, and if we want to put oats in this field next season, we plow those quack-grass patches deep in the spring and disk the balance of the ground. The ground is so rich that the oats will grow heavy and have a tendency to smother out the quack grass in place of the quack grass smothering out the oats.

We are raising seventy-five bushels of corn to the acre on quack-grass patches, where there had been nothing but quack grass raised for several years, in this way, and have made those quack patches pay well while doing it.

If it is a very cold winter, for instance, that will kill clover, and the quack-grass patches are plowed late it will often kill them perfectly. Of course, in a mild winter when the snow protects it, the quack grass will not kill out. My experience is that cold winters are very

hard on quack grass, if it is left plowed up and the sod exposed.

I have pastured it out in my pastures and almost entirely gotten rid of it by pasturing close and sowing white clover and alsike clover on those patches. My experience has been that the stock will pasture these patches of quack grass closer than any other part of the pasture. They seem to be very fond of it and I would like to know if you have any analysis showing whether or not it is good pasture for stock. Not that I care to preserve it as pasture, for I detest the stuff, or any other grass that is as hard to kill as it is, now that I have ridded my pastures of it in the way I speak of.

It may come back if a hard winter comes and kills the clover, or a dry summer. Of this I am not certain. But I do know that I now have white and alsike clover where there was formerly nothing but a quack-grass field. We have it pretty well cleaned out where it has been in corn for some time.

### Fall Plowing and Corn Insects

The "Farmers' Tribune" gives the following timely information:

There are two insects that annually do a great deal of damage to the corn crop throughout our territory, and those two insects are the corn bill-bug and the corn root-lice. The corn bill-bug is particularly damaging to sod corn. It is very fond of timothy bulbs and hence increases rapidly in timothy pasture land. When such sod is broken up in the spring the bill-bug is very apt to do serious injury to the corn. It frequently damages early corn to such an extent that replanting has to be resorted to.

If the land has been in corn a number of years the bill-bugs become less numerous as their natural home is in the sod and not in plowed ground. Such is not the case, however, with the corn root-lice. It is very apt to increase if the land is planted to corn during several successive years. There are no direct remedies that we know of for eradicating either of these, except early fall plowing.

Prof. S. A. Forbes, Entomologist of the University of Illinois, has closely studied the life habits of various corn insects for a number of years, and some time ago observed that in several timothy fields, from fifty to seventy-five per cent of the bulbs were injured by bill-bugs. When that land was planted to corn fully thirty-three per cent of the hills were infested with corn bill-bugs to such an extent that stalks failed to produce ears. Corn on such fields produced from twenty to forty bushels an acre, whereas it should have produced as high as eighty bushels. Where the sod was plowed early in the fall, and then thoroughly disked the following spring, from two to three weeks prior to corn-planting, the injury from bill-bugs was reduced to practically nothing. Fields that were infested with the corn root-lice produced much better stands in cases where the land was thoroughly disked a week or ten days prior to planting, than did those that were not so treated. Where the corn land was disked four times before planting, the damage done by the lice was reduced by ninety-two per cent, while a single disking reduced the damage to the extent of 89 per cent. Thorough preparation of the corn ground in the spring, therefore, not only produces a good seed-bed, but it also aids in destroying the two insects mentioned, as well as some others. It also greatly aids in destroying weeds, causing them to sprout early in the season and to be destroyed before planting time.

With reference to the corn root-lice, bear in mind that this insect lives around the old corn roots through the winter months, and that it is cared for during the entire year by a certain species of ants. Consequently wherever corn root-lice are abundant, ants will also be found in great numbers.

Thoroughly stirring the soil in the spring destroys the ant-hills, and when they are destroyed, the corn root-lice is unable to take care of itself. When left to its own care it is sure to die. Furthermore, keeping the soil bare during the early spring months before corn-planting time, when the lice must depend upon weeds for sustenance until the corn comes up, causes many of them to die of starvation regardless of whether the ants are present or not.

### Agricultural News Notes

Last year the pickle industry in the United States required 2,404 acres for the growing of cucumbers.

The legislature of Iowa has appropriated \$35,000 to be used by Prof. P. G. Holden, of the state agricultural college, to increase the yield of corn in that state by scientific seed selection.



### Tomatoes a Hot-Weather Fruit

THE summer of 1905 was cool and wet. Our tomatoes then, although as satisfactory in point of quantity and as fair to look at as ever, were so poor in quality and flavor that I got over the notion of having them on the table. The tomatoes canned during that season were not palatable and were mostly thrown out. The present season is hot and dry, and our tomatoes have again all the goodness that they are capable of possessing in so favorable a season. We eat and enjoy them daily and in quantity, and probably we shall also again enjoy our canned tomatoes as we used to do. This is in line with the observation that the best tomatoes for canning are those that ripen during the hot weather of August and early September. The quality of canned tomatoes gathered after cool weather has set in in the autumn is very uncertain.

### Dill Pickles

Most people consider "dill pickles," or "sour cucumbers," as the Germans call them, the most delicious, as also the most wholesome, of all cucumber pickles. Personally I agree with this view. Some persons, however, seem to have poor success in making them after recipes given on former occasions in these columns. I find that in order to have really nice dill pickles, it requires warm weather, or at least a warm place to keep them while making. If we take nice straight cucumbers of fairly good size, say six to eight inches long, gathered before the seeds begin to fill, soak them in clear cold water over night or for nearly twenty-four hours, then scrub them briskly with a vegetable brush and pack them in alternate layers with grape leaves and a few dill plants (if we have them; otherwise without); finally pour a brine made of a cupful of salt to a pail of water over them and keep them weighted so as to be completely covered with brine, they should if kept in a room having ordinary summer temperature, be fairly palatable in two weeks, but much better and really delicious in three weeks. We have never had good luck in making these pickles late in the fall.

### The Man with the Rake

In many instances in garden work, the man with the hoe might better be "the man with the rake." In dry weather, broken only by occasional showers that do little more than moisten the surface and start a lot of tiny weed plants, I find that I can do the best work and keep the surface clean and smooth in the easiest and most effective way by running a sharp garden rake all over the ground between such crops as eggplant, peppers, cauliflower, cabbages, celery, and many others.

### Troubles with Onions

A Leetonia, Ohio, reader says he has had trouble with his onions for the past two years. He sets them out early in the spring, and they seem to grow all right until they reach a certain size, when they stop growing and commence to die. Some curl all up and turn yellow. From the meager description I am, of course, unable to say with any degree of certainty what ailed these onions. It may have been mildew, a fungous disease which is carried from crop to crop by means of spores on refuse, tops and rubbish left in the field or plowed under. For this disease the only safe method of treatment consists in changing the field, and in carefully destroying by fire all onion refuse and rubbish. More likely, however, the trouble was the onion thrip. This is a very small insect, hardly visible to the naked eye, and at times very destructive, especially in a dry season. Abundant rainfall would check it. Timely and thorough spraying with kerosene emulsion or with whale-oil-soap solution is recommended.

### Early Celery Plants Going to Seed

A Mount Tabor, Oregon, reader writes that he has planted a patch (6,000 plants) of White Plume celery on the plan known as the new celery culture. His rows are twelve inches apart, and the plants stand five inches apart in the rows. They have made a fine growth, and the quality is excellent. One half of the plants, however, have gone to seed. He asks me to locate the fault, and to give him the name of someone who raises his own celery seed, as he is willing to pay any price for a fresh and pure article.

Celery is very liable to go to seed if the seed is sown too early in spring under glass. I have to wait until about March 1st before sowing celery seed. If I sow much earlier I am sure of losing a large proportion of the plants by "bolting" (running to seed). They are especially liable to do that if set close together. Our

inquirer has his plants standing twelve by five inches. This is indeed very close planting, and can give satisfactory results only under the most favorable circumstances. There must be an abundance of plant food, and also of water. The atmospheric conditions must also be right. It has been found that French-grown seed is less liable to bolt than home-grown seed. I invariably buy the French-grown, although this is usually more expensive.

For me and my conditions, I find it much safer and more certain of good results if I set my plants much farther apart, not less than seven or eight inches in the row, with rows alternating eight to twelve inches, and twenty-four inches apart. The wide spaces are mulched with coarse manure or other litter. In a dry time I try to irrigate by letting a stream of water run down in the narrow spaces, or turning a hose on the mulch.

Our Oregon reader says his land is a sandy loam on which plenty of barnyard manure, a large quantity of wood-ashes, and a small quantity of nitrate of soda, also plenty of water had been applied. That surely is the right way to get a big crop of celery. He sowed seed February 20th, transplanted to cold frame, and thence to open ground about last of April. The mistake that may have been made was by sowing a week or ten days too early and forcing the plants too rapidly.

### Results from the Garden

A writer in "American Cultivator" says: "A farmer's garden, well taken care of, is a great saving in living expenses. It should be so arranged that there will be a continuous crop of garden truck, beginning as early as July 1st, and lasting until frost." I would call such a garden but a poor apology for one. We have fresh vegetables from open ground every day in the year from along in April (green onions, rhubarb, asparagus, with lettuce, etc., from under glass) until the soil freezes up for good in the winter. From that time on until along in April we have to rely on the cellar-stored vegetables and the greenhouse for our supply.

### The Earliest Potatoes

According to my best information and belief, Eureka and Irish Cobbler are so similar that they cannot be told apart by outward appearance or habit of growth. Which name of the two has the right of priority I do not know. For a long series of years I have been wishing to find a potato earlier, if anything, than Early Ohio and just as good in every respect, and saying that I would gladly pay ten dollars for a bushel of it. I do believe that we may now exclaim "Eureka." I have a good supply of seed for next year's planting in the cellar, and did not have to pay ten dollars for the first bushel, either. This potato, whether we have it as Irish Cobbler or as Eureka, is a white potato, slightly earlier than Early Ohio, much more productive, and apparently good for home use and market. It ripens with Noroton (Noroton Beauty), giving rather larger tubers, fairly uniform in size, and of good table quality. Yet, notwithstanding all this, I am not yet ready to give up the Early Ohio in favor of the other two, without a chance of further comparison.

### Filling Vacancies

My patch of mangels or cattle beets contained many vacant spots in the rows. The surface at time of sowing was probably a little rough or lumpy so that the seed did not come up evenly; or it might have been due to faulty working of the seed-drill. To make some use of the vacant spots, I got the whole patch in fine shape by means of cultivator and hand-hoe, and then sowed some of the early table beets (Alpha and Crosby's Egyptian) to fill out the vacant spots in the rows. These beets are already up and doing well. There is every reason to think that they will make good roots. If there is a good market for them in late fall, say at fifty cents a bushel, I shall sell them. Otherwise I let them grow as large as they will before winter, and then store them with the cattle beets. They come handy anyway, and cost only a trifle for seed.

### Disease-Resistant Potatoes

One or more of the experiment stations have attempted to discover or develop potato varieties that are to some extent resistant to disease. The new species *S. Commersonii* violet sent out by Thorburn

& Co., does not prove disease-proof here, nor does it seem more resistant to the early blight than is Early Ohio. Among the more or less resistant sorts one of the stations names the Irish Cobbler (or Eureka). I am now putting my sole reliance for potato crops on the first earlies, the Ohio, Eureka, Noroton and also on the older Beauty of Hebron. If planted on good, rich garden soil, quite early in spring, and well taken care of, especially sprayed two or three times, of course, most thoroughly, I can always count on raising a big crop of any of these sorts, and I am not much in dread of the early blight or any other disease, or insect, either. Yet a good blight-proof late potato would be a blessing indeed.

### Potatoes Without Top Growth

The vineless-potato humbug has been put out of commission by Uncle Sam's Postal Department some time ago, as was to be expected and desired. It showed its fraudulent nature on its very face, and it seems hardly credible that many farmers could have been victimized by it. If any of our readers have been taken in, it is not our fault.

### Cabbages Cracking Open

A Pennsylvania reader asks what is the cause of cabbages bursting open, and how it can be prevented. The next step in the development of a cabbage after the head is formed is to try to produce seed. To open the way for the seed-stalk from the heart, the head has to split or crack open. The remedy is, for late cabbages, not to sow the seed too early. Solid heads should form just before winter, or in case they are to be used in the fall, only just before they are to be used. In a measure the tendency to crack can be counteracted by partially loosening the roots of the plant. The easiest and quickest way to accomplish this is by pushing the cabbage head way over to one side with the foot.

### A New Potato Wonder

Mr. Mitchell, the Washington correspondent of New England agricultural papers, tells about a report from the British vice-consul at Rouen, France, which says that "a new potato brought from Uruguay has been observed for some time with great interest. A variety of this potato, called the *Solanum Commersonii* violet, is said to possess excellence of taste as well as nutritive value, and to be equal to the best potato known in France. This variety is distinguished by its resistance to frost as also to disease, and its one great advantage is that it prospers most in a damp or swampy soil, and whether the soil be clayey, calcareous, or silicious, it seems equally adapted for its culture, provided it is damp.

The price of this potato, which has now been placed on the market in a limited way for planting purposes, is about forty-eight cents. To those who keep track of the novelties offered by the seed-trade from year to year, this item coming to us in a roundabout way contains no particular news. I have that identical *Solanum Commersonii* violet now growing in my garden. It was introduced last spring as a particularly interesting novelty of the season by Thorburn & Co., and offered at the customary novelty price of \$1 a pound as "a surprise to potato experimentors."

It is claimed to grow even in wet and swampy ground. My few (eight or ten) plants are growing in rather dry soil, but I am giving half of the plants a frequent and abundant watering. At present there is nothing especially remarkable or promising about any of these plants. They were sprayed like the Early Ohios next to them, yet show more signs of blight than the Ohios. The tuber is said to be very rich in starch, containing seventeen per cent; to give enormous yields, especially in wet soil, and to be able to endure several degrees below freezing without injury. We shall see.

### Companion Crops

Editor Collingwood ("Rural New-Yorker") does not seem to be very favorably impressed with the idea of combining peas and corn, the peas to come off before the corn will need the room. He had a hard time of it trying to get the weeds (ragweeds taller than the corn) out of the main crop. I do not like any combination of crops which does not allow of easy and thorough cultivation and hoeing. Peas and corn

seem to me the least desirable of any such combinations on that account.

I combine radishes with cabbages. These crops allow the free use of the hand wheel-hoe until the radishes are gathered, when the horse cultivator can be brought into action, and there will be no difficulty in keeping the main crop (cabbages) free from weeds and in the very best state of cultivation. The radishes are also apt to attract the maggots away from the cabbages.

Pumpkins and corn is an old farm combination. There is at least a suspicion that we lose in the corn crop what we gain in the pumpkins. My garden land, however, is rich enough that it can produce a full crop of sweet corn, and some good winter squashes besides. The combination has always proved satisfactory and profitable. The squashes usually grow only of medium size, and such squashes are just what customers want. The large specimens are not in demand.

Cucumbers might do with very early, low-growing sweet corn, but are not satisfactory with the main crop of late varieties. It is too much trouble to gather the few and often crippled pickles which grow in the shaded soil and on the scant supply of available food left by the greedy corn plants.

A much more satisfactory crop combination, and really the one that has given me the best results, is early potatoes with cucumber or melon vines. We usually have these vine plants in rows six feet apart. We simply prepare the ground a little earlier than we would if intended for the vines alone, and mark out furrows between the proposed cucumber or melon rows, and then at once plant early potatoes in the furrows in the regular way. If this is done in April, or even early in May, we can run the cultivator over the spaces between the potato rows, and then, about May 15th to June 1st, plant the melons or cucumbers between the potato rows. Along in July the potatoes are ripe and can be dug. This job may require some care to prevent injury to the running vines, and to leave the soil level and smooth and free from weeds, but it is probably better even than a thorough cultivation, as it gives the soil between the vine rows a very deep and perfect cultivation.

This year I planted potatoes and vines at the same time, late in May, the potato varieties consisting of Early Ohio and Eureka, both of which are very early, and, in fact, among the best of our garden potatoes. The Ohios were still quite green when the cucumber vines seemed to call for more room. I dug a fine crop of potatoes for seed. For seed purposes I rather prefer tubers dug before they are dead ripe. Such tubers keep in better condition for seed and usually give the strongest plants. I shall always try to raise my seed potatoes in this combination way, picking out only the very largest for the table.

### An Ever-Bearing Raspberry

My plants of Beyer's so-called "Ever-bearing" black raspberry are making a moderate growth. Possibly they have not the most favorable environment. I cannot tell whether they come up to the high expectations that the originator's claims have aroused in me.

### The Matter of Varieties

One of the things which the prospective planter of any crop for profit must try to do is to plant the variety or varieties best suited to his local conditions as well as to his own individual management or peculiarities. One grower, for instance, can secure good crops of the Early Ohio potato. He has the right soil for it and gives it the right treatment. Another might not be able to grow forty bushels to the acre. One of my neighbors plants the Triumph potato, a variety which I cannot grow, and secures very respectable yields on his strong clay loam.

Time and again I have tried to grow "second crop" Early Ohio potatoes, and, failing every time, made up my mind that second-crop potatoes cannot be grown in this climate. I now believe that if I had planted the Triumph in my trials, I might, by using the same pains, have succeeded in securing some second-crop tubers.

Another neighbor of mine grows the Gandy strawberry and no other. In his hands it is the great berry for profit. Under high culture he raises large crops year after year, and gets big prices. The last load he took to Buffalo brought him from seventeen to twenty-three cents per quart. Yet many growers find the same berry unproductive and of poor quality, therefore not profitable.

*A. Greiner*



## Fruit Growing

### Virginia Creeper

J. A. B., Altona, Ill.—The specimen leaf which you sent on is from the common Virginia Creeper, sometimes called the American Woodbine. This plant has five leaflets while the Poison Ivy has three leaflets. Bearing this in mind there is no danger of mistaking the two. The Virginia Creeper is a very good porch climber, and largely used for this purpose.

### Time for Planting Small Fruits

R. J., Rocky Ridge, Ohio—The best time for planting small fruits, including grapes, raspberries, and strawberries, is early in the spring, as soon as the ground will work well. Autumn planting may sometimes be done to advantage, but as a rule it is not so generally successful as spring planting, and beginners should avoid planting at any other time than in the spring.

### Insects on Maple

M. M., Akron, Ohio—I doubt very much from your letter if your maple trees are injured with San José scale. I think the scale is probably the cottony maple-scale. Please send a specimen of it for determination. Nothing could be done at this time that would improve the growth of the tree for this year. Probably the best treatment for this scale will be something that can be applied during the winter and early spring months.

*Samuel B. Green*  
\* \* \*

### Picking, Packing and Marketing Apples

If apples of first quality and of leading varieties are produced, the picking, packing and marketing will not be of so great a consideration. In picking apples some prefer the use of sacks, while others prefer baskets. However, they both have their advantages and disadvantages.

The sack can be slung over the shoulder with a strap and the mouth kept open with a part of a barrel hoop sewed into the edge of the mouth and partly around the opening, allowing the picker to easily carry it and use both hands. The objections are that the blooms, if there be any, are likely to be rubbed from the fruit, and the shifting of the sack puts many small bruises on the apples where they rub against each other, which with light-colored or delicate-skinned varieties is quickly noticed.

The advantage of using a basket lies largely in the fact that if the apples are carefully placed in same they are not bruised while in the basket, and the bloom is not rubbed off as in the sack. The objections to the basket are that it is not so handy as the sack, and that careless pickers are disposed to toss apples into it as it sets upon the ground, or hangs on a limb a few feet away.

I prefer the basket. My baskets are the round, half-bushel size, with drop handles. I had an iron hook made for each one which is attached to the handle to suspend the basket from the limbs, thus enabling the picker to use both hands.

In picking apples every specimen should be handled as carefully as if it was an egg. I usually have my apples picked and piled under the trees in the shade, and take the barrels to the apples in the orchard, and barrel as fast as possible. When the barrels are filled and headed up I haul to the shed and stow away in as cool a place as possible until I sell or get enough to fill a car.

The apples are sorted as they are taken from the pile, and sorted again when put upon the table. In packing there should be two grades made. One a strictly No. 1, or fancy grade, and another which will take apples that are slightly defective, but good for immediate use, usually termed No. 2 in the market. I seldom ship my No. 2's. I can realize a greater profit by selling them in bulk to the cider mill at twenty-five cents per bushel than to put them on the market in an expensive barrel, adding on the freight and commission charges.

Take the barrel, one head out, nail the hoops and break off the ends of the nails at the inside. On the inside of the head place a layer of uniform apples, even in color and size, then put in another layer of similar fruit on top of the facers and

fill the barrel with fruit free from defects of any kind. It is very important that the barrel is well shaken each time a basketful of fruit is put in, as the fruit will be tight in the barrel and require less pressing of the head and consequently less bruising of the fruit.

After the barrel is full and the fruit well shaken down, adjust the apples on the top so that they are as nearly level as it is possible to have them. Then apply the press, first seeing that the barrel is on a level, and gently press in the head. Place the head-liners in their proper place, and with the use of a hammer lightly nail in the head. Stencil name of apples on the faced-end of the barrel and also the number of grade.

The marketing problem is one that we must solve ourselves. A common shoe cobbler can bring about as good results in selling fruit as an expert apple salesman, provided he is furnished with first-class fruit and not a dozen different kinds of inferior stuff. The markets are not killed with an over-production of good fruit. It is the over-production of poor fruit that knocks down the price of fancy fruit. There is no time that a large, well-colored and well-matured apple will not demand a fancy price in any market. And when nothing but this class is put into a barrel a handsome profit can be realized. There is always a good demand for a first-class article, but it must be first class.

Retailers in buying fruit judge from its outward appearance. If they purchase a seemingly nice package and find when they open it that inferior fruit is packed between, one package does them, and they won't come back any more. Let's be careful as to what we put into a barrel. The packing is the danger point.

Illinois. W. M. H. UNDERWOOD.

### Fruit on the Farm

There is no reason why every farmer who owns his farm should not have plenty of fruit for his family. A few trees will bring wonderful results. If one ventures to ask why such men do not raise fruit, "haven't time" is the answer. Yet these men will attend an auction sale, stand around all day, buy nothing, and do not think any time lost. Every Saturday afternoon these same men will be found in their nearest trading point, standing around on the streets doing nothing, but have no time to raise fruit enough for their family.

I once asked a man sixty-five years of age who had a good farm and good buildings, why he did not raise fruit. "Oh, I never had time to fuss with the stuff," was his reply. Now that was not true; it is not true to-day, and I can prove it. Every farmer has a garden of some kind. It may be pretty weedy, but it is a plot of ground intended for vegetables. Now let him buy a dozen apple trees. For this latitude in Illinois, about 41° 20', the following apples will do well: One Duchess of Oldenburg, for early cooking, last of July and first of August; two Wealthy and two Grimes Golden, for autumn and early winter; one Minkler, two Jonathan, two Gano, one Willow Twig, one Golden Russett. These are old and tried varieties, but they will bear and furnish apples from August to March. I have had Gano and Willow Twig up to April 15th, and while they are perhaps not as fine as other varieties, I usually have apples in late spring when my neighbors do not have them. Do not buy of agents; they are not always reliable. Get some price lists of nursery firms who do not employ agents, and order your trees.

Plant your apple trees next to the fence farthest from the house. If you have more than one row, plant the second row far enough away so that there will be no difficulty in plowing between the rows. Now get half a dozen Early Richmond cherry trees, and plant them on the side of the garden nearest your house, so that you can drive the birds away more easily. Across one end of your garden plant three Early Crawford peach trees, and at the other end three Late Crawford trees. In a former article I suggested a row of grape-vines in the center of your garden. This will furnish all the fruit you will need, and it will be nice, healthy, wholesome fruit. It will take very little of your time and reduce your grocery bill considerably.

The list of trees would need to be changed according to latitude and longitude, but if you are a subscriber to FARM AND FIRESIDE you will have no difficulty in making your selection.

Illinois. U. S. ELLSWORTH.

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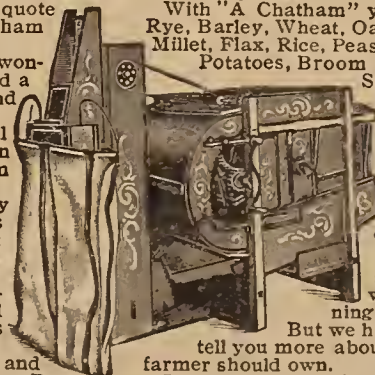
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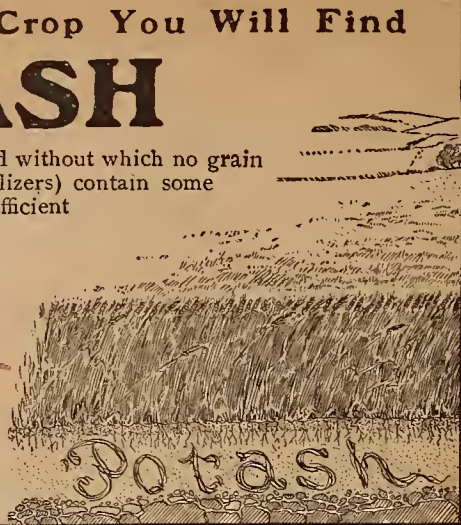
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## Poultry Raising

### Cracked Corn

**T**HIS well-known food holds the highest place, not because of its value, or that it is best, but from the fact that it has been used so long and is so convenient that to displace it is not an easy undertaking. It may be "standard" in the estimation of many, but it is not the most suitable food for adults or chicks at this season of the year, as it is heating and fattening. It is unnecessary to go to much expense to feed birds when there is so much green material on hand growing luxuriantly, as the birds will find and secure more food than they can consume. Of course they may have some cracked corn given them, but as they will eat between meals, and no one can prevent them, it is harmful to have a full supply.

Vegetables, cooked and raw, are excellent, and there is nothing better than meat, especially cooked. They require grit to assist them in digesting their food, and the grit must not be neglected. Chicks fed from the table turn out to be the best all-round birds of any, but this is only possible with a few chicks, as table scraps are limited in quantity. A brood of late-hatched chicks will not be objectionable on the table, if they are kept growing, and they will cost but little at this season. Cracked corn is not a summer food, but may be used sparingly with other kinds.

### The Turkeys

It will not be so very long before the Thanksgiving turkeys will be sold, and they cannot grow too rapidly if they are to reach large sizes and heavy weights. It is not necessary to feed them while the weather is very warm, but they should be examined at least once a week in order to protect them against large body lice and small mites, the latter attacking at night and the former at all hours. If young turkeys are kept free of lice they will grow much more rapidly than if given no care in that respect. As soon as green food on the farm begins to fall off, give them grain and a proportion of animal food.

### Contagious Diseases

Diseases seem to appear on the best-regulated farms, and without apparent sources. Pigeons that are allowed to fly from farm to farm carry diseases, and the sparrow also does its share in distributing germs, while even some insects are not exempt in that respect.

That eminent French chemist, Pasteur, obtained earthworms from the soil, filling a pit into which the carcasses of animals dead from the splenic fever had long before been thrown, and from the intestines of these worms he obtained the means of reproducing the disease in its most virulent form by inoculation. He showed that the worms, by casting over the surface earth containing the bacteria germs, were the cause for their presence upon the vegetation which grew upon the spot, and that animals which ate of this vegetation were as certainly killed by the germs which they swallowed as were those which received the same germs through the prick of the inoculator's needle.

If one disease may be communicated in this way, may not others? The result of these investigations is of great practical importance. From it we may learn that all animals dying of infectious diseases, or indeed of diseases not well understood, should be incinerated, or buried in places not accessible to healthy cattle, or where the vegetation growing on the graves cannot be eaten by stock. Farmers not infrequently are very careless in this regard, burying cattle dying of disease in such places as are most convenient, and allowing the stock to range and feed over the graves. Gapes in poultry cannot always be accounted for, but the investigations mentioned may be worthy of consideration in attempting to fathom the mystery of the appearance of gapes in young chicks.

### Patches of Green Food

A small patch of white clover, or white clover growing in an orchard, makes an excellent green food for fowls, and the seed may be sown at this season. The young clover will answer as well for the hens as that which has occupied the ground for a longer time. If hens are confined, it will pay to seed down green crops for use next spring, white clover, scarlet clover, alfalfa and rye affording a variety. Pastures that will not permit of being utilized for cattle or other animals will prove very serviceable for hens.

### Green Bone

Green bone cannot be ground, the bone-cutter being used for reducing it to suitable pieces for poultry; but dry bone can be ground with less expense than to cut it. Green bone is easily digested by hens, and is a valuable food, especially when fresh from the butcher. All kinds of green bones may be used for poultry, and they contain a proportion of adhering meat, as well as a large percentage of blood (nitrogenous food) which does not exist in oyster-shells. Hence, by the use of bones, one secures excellent food for providing the albumen for the eggs as well as lime for the shells; the green bones, therefore, are superior to all other substances that can be supplied to laying hens after warm weather goes and winter begins. It may also be claimed in favor of green bones that they cannot be excelled for providing egg-producing foods, and giving good results at all seasons. They are cheap because they induce the hens to lay. A bone-cutter is an essential appliance on farms where poultry and eggs are expected to give a profit.

*P.H. Jacobs.*

### Watch the Prices

The farmer who will keep himself informed regarding the markets will not only know when to send his poultry to market, but also when his chicks should be hatched so as to reach the market at the proper time. Just when asparagus is being cut the broiler appears. The broiler sells for as much as fifty cents a pound in April and May, and during some years, when the supply was small, seventy-five cents a pound has been reached by the broiler, the preferred weight being one and a half pounds. Chicks hatched about January or February should be of proper weight in April and May, according to breed, management and rapidity of growth. Then there are the Hebrew holidays, when geese are largely in demand, while the various watering places create a market for green ducks in June and July, and at good prices.

### The Drones

Every farmer or poultryman should be able to select the drones from the layers. If one has a fine flock of fowls it requires courage to discard any portion of them, for as long as some of the hens are laying it indicates that others may begin, though disappointment sometimes results. Time and labor are bestowed with the belief that the unprofitable hens will soon begin to lay, but not until the weather is warm do the hens give a full quota of eggs. This condition of affairs is so well known that it is familiar to all who are interested in poultry.

The remedy is to thin out the flocks before winter appears, so as to keep no unprofitable hens. If you wait for them to begin you may meet an expense too great to be repaid. Get rid of the idle hens, and keep only those that are giving a profit. It is better to possess a flock of a dozen hens that are doing service in egg-production than to have twice that number to feed, with the production of eggs at a minimum.

Small flocks will sometimes pay when large flocks afford no return for the outlay. If the poultry-house is made to do double duty, and a certain proportion of food is allotted to two flocks instead of to one only, the food will be wasted, because it is insufficient for the purpose desired. Every flock should contain only a sufficient number of fowls to occupy the area of land devoted to them, and it is just as necessary to thin out the drones as it is to perform any other duty pertaining to management.

### Summer Profits

It is known that the hen is an active fowl, and requires no help from her owner in summer if she is permitted to secure her food. She is a forager and scavenger, even the sheep not excelling her in disposing of weeds and other unmarketable green material on the farm. The hen not only converts waste foods into meat, but is also a daily producer of an article that is in constant demand. She produces a large profit at all seasons of the year, considering the small amount of capital and labor invested in her.

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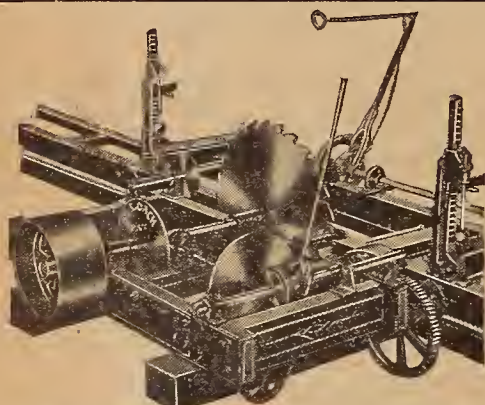
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## Live Stock and Dairy

### The Measure of Success

THE yardstick which we may lay down as the measure of success in farming is the one word "care."

It is really painful to hear farmers say, as they do so often, "It is good enough. That is all I care about."

Nothing ever is good enough unless it is the very best we can make it. Anything short of that is an invitation to failure. And yet thousands of farmers all over the country are working on the "good-enough" principle. Their fields are plowed well enough. Their harrowing is good enough. Their cows are well-enough cared for so that they "get through" the season alive. That is all they ask. And so on through the whole list of farm operations.

What can we expect of the man who does his work on this principle? Just what we actually find. They are always camping just on the wrong side of the line which separates success from failure. Their crops are never above the average. Their cows make no records that the world knows of. They themselves always stay right where their fathers left them in the morning of life. There are no heights for them to scale. They do not care to rise above the common run of men. They are satisfied to drift, and we all know that drifting never brings a man out at the head of the boat race. The man that wins must get right down to business and pull for dear life. He must care. If he doesn't care for himself, nobody will care for him. Just what does the question of care in farming imply?

I know a farmer that keeps a number of cows. If a bad storm comes up while those cows are out to pasture, he gets them down to the stable as quickly as possible and feeds them so that they shall not be hungry while the storm lasts. He

is where he has the advantage of others engaged in the same line.

But this is not the only particular in which the farmer to which reference is made exercises care. His horses are well cared for. If they have been out in a storm, when they come in they are first rubbed down with clean straw or a dry cloth. Then a light blanket is thrown over them. After they are partly dried off, he goes out and slips over them a heavier blanket, for he remembers how it is himself after an exposure of this kind. When he comes to sit down he begins to feel chilly and needs another coat. By taking this precaution he wards off a hard cold. He knows that his horses cannot do that for themselves, and so he must do it for them. He does not end here, either. Later he goes out and gives his team a careful grooming. The horses enjoy this. They rest better for it and they are in good flesh and ready for business all the time. He prevents sickness in his horses by feeding them for health, and not by giving them medicine after they get down.

In the season when he is using his farm tools he sees to it that none of them are left out in the rain or snow or lie on the damp earth very long at a time. This saves tools, and tools cost money. We are few of us aware of the actual money loss to us as farmers every year through want of care in this one direction alone.

Still further, his crops are all cared for when they should be. The hay is cut promptly and in good condition. His grain is harvested so that he gets all there is of it. In short, this man, who is not a fancy character, but an actual flesh-and-blood farmer, wins success because he measures everything he does by the single standard of care.

Here is a measure every single man, this whole wide world over, may lay down



PRIZE HOLSTEIN COW

does more. He takes an old bran sack or some similar cloth and goes down the line of his cows, wiping the wet from their backs and sides, rubbing them till they are all dry again. He chafes their legs if they are cold and damp. He does this all himself, personally. I have seen him in the spring or fall, when there comes up a flurry of snow, out of season, wetting his cattle from top to toe, down in the stable brushing the cold mantle of white off carefully and rubbing them thoroughly till they are all warm again.

Why does he do this? Because he knows that there is a direct relationship between comfort and success in dairying. A cow that is chilly and uncomfortable cannot give as good milk nor as much of it as one that is not subjected to these unfavorable circumstances. That is why he gets his cows in out of the storm. That is why he rubs them dry. That is why he feeds them all well before he turns them out again. That is why he does everything he can to make them feel comfortable and happy.

You call that foolish and say the man is a slave to his stock. It is harsh language, and you would never use it if you once became sufficiently interested in your work to follow his example. You would see that this man makes more out of his cows than any other man in the neighborhood. You would be convinced that from a financial standpoint alone that man makes his business a success. And that

for himself and be profited thereby. No man has a monopoly on care. It is free to all who will use it.

New York. E. L. VINCENT.

### Feeding Pigs

Some farmers think that it does not make any difference where pigs eat. This is a mistaken idea. A platform can be made near the feed house, the size of the platform depending upon the number of pigs. My plan is this: The floor is enclosed by a three-board fence. A gate on hinges made, by which to reach platform from corn-crib and feed-barrel. Six troughs are arranged in twos on the platform, two at each side and two in the middle, so as to allow passing between without soiling clothes and to give sufficient room for the pigs. This number of troughs will accommodate between fifty and one hundred pigs. Another large gate is made opposite the small one. This one slides up and down. It is raised after the slop is placed in the troughs. The pigs then rush in and eat, after which, they are immediately driven out, so that the platform is kept as clean as possible. It must be cleaned occasionally. Give pigs large fields to run in, and gradually increase the amount of protein food, thus making blood, bone and muscle so that they can take on fat later.—E. M. Lynch in Successful Farming.

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### A Little More Patience Wanted—Right to Retain Certificate Given to Blind Person

W. H. C., Ohio, writes: "I received my July 15th FARM AND FIRESIDE this morning, and see you have not answered my question. Now, why? I am a regular subscriber and solicitor and send you about twenty names every spring. Now let us try it again. Has the auditor the right or authority to keep the paper made out by a notary public and the probate judge's certificate when sent to him through the mail to grant an order on the treasurer for blind relief? Who has the right to revoke the certificate, the auditor or the court?"

Patience is a virtue that will need to be exercised by the patrons of this paper if their queries are not answered just as prompt as they expect. It is the aim of this department to in some way answer every query received, but from the fact that persons in charge have a great many letters coming to them, it is certainly not to be unexpected but that some time some letter will go astray. It has heretofore been a few months before queries were answered. In the future it will not be so long, probably one month. I have no recollection of having received the above query. Proceeding now to the answer permit me to say that the probate judge is the only person who has a right to revoke this certificate. This may be done upon petition of any taxpayer who is interested. The auditor might possibly wish to retain it for proof that the order was sent to the person correctly mentioned, but ordinarily I should think that the auditor would return the same, especially if he was asked to and postage given him for that purpose.

### Killing Vicious Dog

B. F., Ohio, writes: "While riding along the road on a bicycle, with a revolver in my hand, a dog came into the road and snapped at me three times. I dismounted and shot him. The owner threatened to arrest me if I did not pay him \$6, which I paid. Had he any right to demand it, considering the circumstances? Has a dog any right to be running on the road, loose and unmuzzled during the summer?"

My opinion would be that you were perfectly justified in killing the dog, and that the owner could not have made you any serious trouble if you would not have compromised the matter with him. A dog has some rights as well as other animals, and if he is merely running on the road not bothering anyone it would be an offense to kill him, but if he should happen to be vicious in any way, attempting to bite persons on the highway, he would forfeit his right to protection.

### Description in a Deed

J. E. R., North Carolina, writes: "If the closing line of a tract of land lacks fifty to seventy-five poles of reaching the beginning, what is the law? Can he go on to the beginning or will the second last line have to be changed, so as to make the number of poles in the deed reach the beginning corner?"

Where a description of a deed gives certain points as the boundary of the premises described, such points or monuments as called in the conveyance, fix the true boundary of the premises described, and if a course from one point to another should not accord with the length given to such course in the deed the points would control, and the length would necessarily conform to the exact distance between the several points.

### Decree of Divorce in Another State

R. H. S., Ohio, gives the following facts: "A. and B. are husband and wife. B., with A.'s consent, goes to her mother's on a visit. When B. has been gone a few days, A., becoming angry at an imaginary wrong committed by B., rents the home and leaves the state. A. stayed away nearly six months. During his absence B. gave birth to a dead infant and was dangerously ill, caused by worry and anxiety about A. He left her without any means of support. B.'s mother and sister cared for her during her sickness. When A. returned B. wrote to him for some money to help pay her doctor bill. A. refused to pay her bill, and sued for a divorce. B. filed an answer and cross-petition, and asked for alimony. B.'s suit was compromised and settled by A. paying her a certain amount. A. acknowledged to B. that his petition was false. If he goes to some other state and sues for divorce, and does not notify B., would the divorce be valid? If A. succeeds in getting a divorce without B.'s knowledge can she have it annulled when she learns of it? If he cannot get a valid divorce in his own state, can he get a valid divorce in any other state? Does not the late decision of the United States Supreme Court

## The Family Lawyer

Legal inquiries, of general interest only, from our regular subscribers will be answered in this department, each in its turn. On account of the large number of questions received, delay in giving printed answers is unavoidable. Querists desiring an immediate answer, or an answer to a question not of general interest, should remit \$1.00, addressed to "Law Department," this office, and get the answer by mail.

rule all the states? How long does a person have to be a resident of South Dakota before filing suit for divorce?"

Whether one state will recognize a divorce granted in another state depends entirely upon the laws of the state in which the parties affected reside. If a party left the state of his residence and went into another state and got a divorce in that state without in some way notifying the party that remained in the state of his original residence, I do not believe that the courts of the state where the party originally resided would recognize the divorce as binding upon the other party, especially if there were property rights involved. Usually if a party makes application for divorce and the defendant is not a resident of that state, publication is made and the party is required to mail a copy of the publication to the defendant. Under the circumstances narrated in the above query, unless the defendant should be notified, I do not believe that the courts of Ohio, would recognize the decree granted in South Dakota. The required residence in South Dakota for a divorce is six months.

### Length of Time in Which to Accept Executorship

A. M. J., Ohio, inquires: "A. died leaving a will. His widow is named as executor. How long a time has she to decide whether she will accept same?"

There is no particular time provided by the statutes of Ohio in which an executor is bound to qualify, and unless someone makes application to the probate court the matter of qualification is usually left to the discretion of the executor. If any interested party desires to have the estate administered it would be proper for such person to inform the probate judge of the facts, and a citation would be issued requiring the executor to decline or accept the trust within such a time as the court might provide.

### Fence on a Line Stream

A. S., Mississippi, writes: "A. and B. own adjacent farms. The division line between is a running creek. A. has a pasture on his side and wants the use of half the length of the creek for water for his stock. Of course, to get this use he will have to put his fence part of the way on B.'s side of the creek. B. objects, he himself having no need for the use of any of the creek, having other water on his land, and his cultivated field not enclosed. Will not the law compel B. to allow A. the privilege of putting his (A.'s) fence half the length of the creek on B.'s side, allowing B. the same privilege on A.'s side? They live under a stock law compelling every man to keep his stock on his own land."

My opinion would be, in the absence of statutes, that where a stream is the line, and it being impossible to put the fence in the middle of the stream, that the adjoining proprietors should put half of the fence on one side of the stream and the other half on the other side, having a flood-gate, which should be kept up jointly, crossing the stream at the end of the division of the fence that each should keep up. Such has been the custom in the absence of statutes in many portions of the country. If A. wishes to use the stream and confine his own cattle he will be obliged in the absence of statute laws to build a fence on his own land and if possible make a waterway out into the stream for his cattle.

### Rent of House, etc.

E. M. C., Ohio, writes: "A. rents house and lot from B. A. was to have the unreserved use of lot with house as long as A. rented the house. No part of lot being defined as belonging to house. On part of lot a chicken-house and park were built by A. B. buys a house and moves it on part of lot used by A. and tries to move park, without asking A.'s consent. A. notifies B. to stop. B. then makes agreement with A. to move A.'s out-buildings immediately and arrange in such a manner that A. can have room on half of the lot for chicken-house and park. B. has had forty-seven days to do this and nothing has been done. Drainage from roof of moved house runs into park, making it very unsanitary. Can A. keep B. from working on house till B. has fulfilled his agreement? A. pays rent

promptly, but after agreement paid one month's rent. Now A. refuses to pay till agreement is fulfilled. Property is for renting purposes. Can B. put A. out?"

This tenancy seems to be one of somewhat uncertain character, and B. could probably find some reason whereby he could terminate the tenancy by giving A. a reasonable notice. If B. desires to use the other lot he will simply refuse to rent the house to A. unless A. complies with the new condition of affairs. If B. refuses to let A. have the use of the lot, of course A. is not obliged to keep renting the house or possibly not obliged to pay rent, but B. could put him out and claim the lease as forfeited.

### Right to Build Dam in River—Flooding Lands, etc.

A. S., New York, writes: "The Hudson River Power Co., with headquarters at Glens Falls, N. Y., are preparing to build a dam at Conklingville that will flood thousands of acres of land. Some of the land is almost worthless, but part of it is the best of land. Are we obliged to let them have our farms at their own price, or must we be drowned out and driven into litigation and robbed of our homes?"

No; the Hudson River Power Co. nor any other company or individual would have a right to put a dam across a stream which would impede or turn the natural flow of the water in such a way as to injure the lands of another. By reason of a special act of the legislature such a company might be authorized to build a dam and appropriate the lands that might be injured for that purpose, by proceeding by law to acquire such right and paying compensation to every person injured.

### Location of Taxation

S. M. B., Ohio, says: "I live in Ohio. Can I ship milk to private customers in western Pennsylvania towns without a license or tax of some kind? If I live in Ohio and have money in a Pittsburg bank, do I have to pay taxes on it?"

You would be obliged to list the property for taxation in Ohio. This money in the bank would be a credit of yours which is subject to taxation. I don't know about the license law.

### Right to Use Roadway

G. W., New York, writes: "I live on a road made by myself and my uncle, one mile from the public highway. No one but we two have ever worked on it. It runs one half mile through the woods on a man that lives along the public road. Has he a right to use the road made by us?"

The above query is not definite enough in stating whether the highway worked upon by the querist and his uncle is a public highway or merely a private right-of-way. If it is a public highway, that is a road donated for public use, the mere fact that only two persons worked on it, would not prevent a third from using it. If it is a private highway, then, of course, it will be under the exclusive control of those owning the same.

### Making Successful Inquiry as to Estate in Ireland

H. B., Ohio, writes: "I would like to know how a person should proceed to find out whether there was real estate in Ireland belonging to a deceased relative."

To obtain such information address some attorney in the place where the estate is located, accompanying the same with a sufficient fee to assure his compliance with the request.

### Assessing Property for Taxes

H. L. G., Ohio, inquires: "I wish your views on law governing assessor's duties. I have a one-hundred-acre farm. A. is going to farm it, and delivered to me a written contract to pay me \$425 on March 1, 1907. The contract bears no interest. Should I give it in as taxable property? It has no present value. If it had been a horse to be delivered, would I have had to pay taxes on that? Is it a note or contract? If it is a taxable note, should I give it in to full amount?"

My judgment would be that the contract would not be considered a taxable credit within the meaning of the law; that it is merely an agreement to pay something and not an actual asset within the meaning

of the law, that is, if it is only considered as a contract. If it was in the form of a note there might be some question, although the note is not due, and yet it will be a mistake to say that it has no value, for the note could be assigned and transferred, but the consideration of this note seems to be one that runs for the entire year. If it were me I would not return this note for taxation.

### Liability to Perform Two Days' Labor on Highway

H. O. C., Ohio, asks: "Is a person who has lost a limb and one eye, and who has no taxable property, exempt from working the two-days' road-tax, or poll-tax, or can he be compelled to work the two days by law?"

The statutes of Ohio do not make a physical disability an excuse for not performing the two days' labor. The statutes saying: "that all male persons between the ages of twenty-one and fifty-five years, able to perform or cause to be performed the labor herein required, excepting honorably discharged soldiers, pensioners of the U. S. government, and acting and contributing members of the Ohio National Guard." So a person may be physically disabled as you state and have no taxable property and yet be liable to perform the labor or to have it performed. The probabilities would be that a person in the condition above stated would not be liable to perform the labor.

### Patent on Cement Fence-Posts and Water-Troughs

J. A., Ohio, would like to ask concerning cement water-tanks and cement posts. There are some parties who purchased the right to make tanks and posts in his neighborhood. He wants to know if it is lawful for each to make his own tanks and posts.

Unless there is some peculiar matter connected with the construction of the post or the water-trough, there would be no patent to infringe upon in making the same; that is, anyone may make a water-trough or a post, and I should think he could put such metal inside of the construction as he desired. Of course, he should not use the form or the method of construction upon which someone had taken out a valid patent.

### Time Within Which an Administrator of Estate Should be Appointed

C. A. B., Ohio, writes: "Does the law of Ohio give any specific length of time before an administrator can sell real estate at public sale, court to make the deed? If so, how long?"

The laws of Ohio fix no particular time within which the administrator must be appointed. After the administrator is appointed and it is found necessary to sell the real estate of the deceased person to pay his debts or to make distribution of the same according to his will, the administrator files his petition in court. This will take from one to three months to get the property sold, depending upon how readily all the persons can be properly notified, and whether the property is sold at public or private sale.

### Right to Acquire Title by Adverse Use

J. F. W., Connecticut, inquires: "If a man travels over or across another man's land without paying for the same, how long a time will elapse before he will gain a right-of-way?"

The mere fact that a person may travel across the lands of another, or may use the same for a certain length of time will not of itself give such a right as may terminate in an absolute title. In order for a person to have a right to title it must be a possession open, notorious, continuous and with a claim of right.

### Interest in Real Estate

H. S., Pennsylvania, asks: "My father died, leaving the farm to my sister and myself, and the widow getting a one third dower interest as long as she lives. I bought my sister's interest, leaving the one third dower. I became involved in debt, and had property sold from me. Could they sell the one third interest as long as the widow was living?"

Yes, I think they could sell your interest. From what you say the will seems to have given the property to you and your sister absolutely, the widow merely having a life estate in one third, and, of course, as you had the entire estate it would be subject to your debts. Just what interest your wife might have had, and whether it has all been wiped out, will depend very much on the statutes of your state.





**National Master Bachelor in Ohio**

NATIONAL MASTER BACHELDER gave but one day to Ohio, and State Master Dertthick assigned him to Licking County. The meeting had been widely advertised and a great crowd was present, though hundreds were kept away on account of the rain which fell in torrents. Governor Bachelder's friends in Ohio are so numerous that even a storm cannot keep hundreds away. The trolley facilities were taxed to the utmost.

Governor Bachelder dwelt on the great achievements of the past, indicated the way legislation is secured, and spoke of the great battles yet to be fought in a national way. "Agriculture is the bed rock of all other industries. It alone is creative. Transportation changes the place of things, manufacture changes the form, trade exchanges commodities, but none of these produce. Agriculture alone produces. It should not be a side issue but the main one."

He deplored the fact that in the Congress of the United States there were only two or three farmers, and urged the farmers to look after their own interests, and elect farmers to represent them. He congratulated the order in Ohio for its strength, and the state master for the splendid achievements of the past. He said the grange was never stronger, never so well prepared to carry on the work on behalf of the farmer as to-day, and that there was never a time of greater interest.

State Master Dertthick spoke against building larger warships. He said: "The United States has been urged to build another great warship costing about \$2,000,000. If she builds one, then would England, Germany, Russia, Japan, and all the great nations need to build a little stronger one to hold their own. And the next step would then be the building of a larger and swifter ship than our country, to be followed again by the others, thus consuming millions of dollars. Put this money in education, in good roads, and in improved waterways. Education is the nation's chief defense, not battle-ships. This proposed battle-ship would cost within \$2,000,000 of what the common schools of Ohio cost annually."

Of the unrest in the country, he said it should be trained into useful channels if mankind was to be helped. He warmly espoused a graduated income tax and an inheritance tax. When a multimillionaire dies, one who could not possibly have honestly accumulated such a vast sum in a lifetime, he would take a large per cent of this estate and return it to the country for the common good to be used in education, good roads and improvements that would better the people. He urged the farmers to organize, educate and act decisively and intelligently.

National Master Bachelder is always sure of a warm welcome and a big crowd when he comes to Ohio. His ambitions for the national grange are high, his courage steadfast, his determination unwavering. He has stood squarely and effectively for the farmers' interests when it cost political preferment. All honor to a man who puts personal advantages aside and stands for the best interests of a people. The good wishes of Ohio people follow him.

**Passes and Vocations**

It may become obligatory on those who desire to enter the political arena to graduate from colleges of medicine and law to be able to secure passes over railroads. When anti-pass laws went into effect it was a matter of curious interest to see how many members of the legislature who were physicians became medical employees of the railroads, and how many lawyers were retained as counsel, each with passes in his pocket! The pass is a cheap, easy and effective way of buying people.

**Campaign Funds**

The popular outcry against contributions to campaign funds from interests that are inimical to the best interests of the state, has deluded fond optimists into the belief that such contributions are a thing of the past. The call for popular contributions from several parties has served to strengthen this belief. Be not deceived. Those who follow "law-honesty" methods are not so easily silenced. They realize the force of Hamilton's adage, "He who controls the subsistence of a people controls their will."

These shrewd gentlemen do not intend to let the maintenance of the parties pass into other hands, and thereby the control of the wills of the parties. In some way the contributions will be made, and they will be accepted. The call for popular



**The Grange**

contributions is a bit of humbug, but the people like to be humbugged. However, with wheat at sixty-eight cents and cattle three and one half cents, farmers will not be flush with extra cash. Moreover, when they make their contributions they will not know to which wing of the parties they are contributing. But as an advertisement this popular subscription is a shrewd one. If a man has his money invested he will get out the brass bands, tom-toms, banners, flags, and provide for the huzzas that make men forget their reason. And what would a campaign be without noise?

**The Observatory**

It will be time enough to boast of the accomplishments of congress after the railway-rate law is tested, and the fate of denatured alcohol is decided by the commissioner of internal revenue.

Mrs. C. E. Harris, of Darke County, Ohio, has organized a juvenile Pomona. The juveniles should be better supported. They will not be unless the women take the matter in hand.

"Care for the body must precede care for the soul; next to care for the body must come care for the appetites; and, last of all, for the intelligence. We train the appetites for the sake of the intelligence, and the body for the sake of the soul."—Aristotle.

The plight of the parties in getting a platform that will not say too much to frighten campaign contributions nor too little to satisfy the demands of the people is truly pitiable. The last thing the gentlemen seem to think of is a really statesmanlike position on state and federal matters.

The grange was organized to look after the interests of the farmers; labor unions to conserve the interests of labor; commercial organizations of various sorts to protect the interests of those engaged in commerce, and so on through the long list or organizations. Each looks after its own interest, seeks laws beneficial to itself, and each is becoming more closely organized. The final result will be cooperation.

*Mary E. Lee*

**The Farm-Labor Problem**

That it is more difficult to get sufficient and satisfactory help upon farms than formerly is very generally recognized. What the farmer wants in a discussion of the problem is a solution and not a mere statement of it. Yet an understanding of the changes that have brought about this dearth of farm labor helps toward the solution.

While the population as a whole has increased greatly in the past three decades, the rural population in many of the older states has actually decreased. Families are smaller and the boys and girls spend more of their time in school than did their fathers and mothers. Then a large per cent of the young people take work in the shops, trades and professions, because of the larger compensation these lines offer. It is this larger pay in almost every occupation than that of farming that more than all else takes young men from the farm. The fact that this higher wage is often delusive because of the corresponding increase in expense does not seem to lessen the attraction of the higher wage.

The smaller family and the transference of the children from the fields to the schoolroom much of their time are accompaniments of civilization that are not likely to be changed. It leaves the solution of the problem in the increase of farm wages and making farm labor more attractive.

This, at first thought I know, seems an impossible solution to most farmers, because they are now paying to the limit that their income from the farm will permit. Or, in most instances, they figure that if they were to pay themselves the same wage for each day they labor that they pay for occasional help there would be nothing left as rent for the farm.

There are two ways of paying more for labor on farms. One is to pay more per day for occasional help; the other is to

give steady employment, so that the laborer gets more for the support of a family during a year. It is in this latter sense largely that the farmer must pay more wages. This calls for some readjustment of the work of the farm, so that there shall be profitable employment throughout the year.

This means in most instances more diversified farming, especially the keeping of more live stock, and in some instances the marketing of it in a finished form. The marketing of hogs as cured pork, an entirely practical thing near large cities, is illustrative of the thought here. Supplying private customers in towns and cities with many of the products of the farm may well give profitable employment on many farms during the winter months.

I consider this regular, throughout-the-year employment a very large factor in the solution. An important feature in successful farm management is the getting of work done at the right time. The farmer who does not know with a reasonable degree of certainty just how much help he can depend upon for the planting and harvesting faces chances that are decidedly against him. This the farmer cannot know who depends upon hiring by the day when he gets in a pinch. Moreover he will always have to pay more per day in times of stress than when he employs by the year.

With the high rate of wages prevailing in all other kinds of employment, we shall certainly be compelled to pay a higher rate of wages for desirable farm laborers. This we can do only by making more out of their labor. That is not to be done through longer hours. The farm laborer will not work cheerfully for twelve hours when others work only eight, or at most ten. It is to be done by making him produce more each hour he labors. Several details of farm management will contribute to this, among them adaptation of crops to soils and markets, more careful selection of seed, more intelligent fertilization and skilful tillage of the soil, but more largely, and especially for immediate results, the substitution of horse power and machinery for manual labor.

The man who continues to plow with two horses, turning one furrow at a time, and who prepares the seed-bed with the same two horses cannot compete in the labor market with his neighbor who puts his hired man to plowing with four or five horses turning two furrows at a time, and harrows the ground at the rate of twenty acres a day, and later with a two-row cultivator cultivates twenty acres a day.

These large machines do call for larger farms. They are not for the ten-acre field. The farms of the future will be either larger or smaller. The man who cannot from any cause get fields eighty or more rods long will be crowded out of corn and wheat growing. Small fields will have to be devoted to crops, as potatoes, cabbage, tomatoes or fruits that yield a much larger return per acre.

Farming has been the last industry to yield to the changes incident to the marvelous era of invention and manufacture of the past generation. It must yield however. The tragedy of the farming world to-day is to be found in the fighting against fate by continuing to do what was once profitable but is now unprofitable.

Feeding beef cattle in the Eastern states is an instance of working a losing game for the past twenty years, except in rare instances. The man in the West who could get pasturage almost free, and corn and hay at half the cost to the Eastern farmer, could produce beef at the prices that have prevailed. The Eastern cattle raiser who would not go into dairying or some other line that his farm and market favored has been losing money.

Another factor, merely mentioned above, that the farmer must call to his aid, is that of the inviting home for his laborers. The changes that have come about in the home of the farmer make it undesirable to board the help. For many reasons not necessary to mention here married men are preferable. Advancing rents and the crowding of foreigners into the sections available to common laborers increases the consideration a desirable farm laborer is willing to give to a country home with comfortable surroundings, so that a little investment in this direction will be found an increasingly helpful factor in the solution.

Skill in directing the work, self-control and counselling with employees are some of the factors that aid in keeping help contented.

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## CHAPTER I.

"I BELIEVE I will go home through the woods. It will be muddy that way, but I may find some hepaticas for Alice, and I may be able to get rid of this sense of depression that has haunted me all day."

Elsie Howard was on her way home from the little country schoolhouse, where for five years she had acted as teacher. She passed through a gate into a field. There the clover sod gave her good footing. The teacher walked slowly, a thoughtful look on her bright face. The glory of an early girlhood had passed from Elsie Howard's countenance, and in its place had come something which made the keen observer think of the change as a full fruition rather than a loss.

It was a day late in March. There was a breath of springtide in the air, although in sheltered spots the snow still lingered. The sky was unclouded, and against it the bare limbs of the trees growing along the fence were etched in shades of dull gray and brown. At the top of a low, long hill Elsie paused. The downward slope of the hillside was covered with a growth of forest trees, and at its foot wound a stream. The current was strong, and the muddy water caught the rays of the sunlight.

Beyond the creek stretched undulating fields which reached on to where, on a slight elevation, stood a group of buildings. The trees of a great orchard and groups of evergreens somewhat obstructed the view from the spot where Elsie stood, but it was easy to see that the house was large and the outbuildings many and commodious.

"Father was right," the woman said to herself. "I should have been the son he so much desired. My heart clings to the old home. It hurts and angers me to see things neglected there as they are."

Just then her soliloquy was interrupted by the appearance of a stranger. He emerged from the woods, walking slowly, with his head bent. Not until he turned to look at the scene spread out before him did he see Elsie. The gentleman lifted his hat. He was a little below medium height and slender. His steady blue eyes looked through glasses, and a heavy brown mustache hid his mouth.

"I beg your pardon," he began, "but can you tell me anything concerning the boundary lines of this place, Howard Farm, I believe it is called? On the north does that wire fence denote the line between it and the adjoining farm?"

"It does," Elsie said. Then she went on to point out the other boundary lines.

"Thank you. It is a fine place, a typical farm home. I cannot understand the willingness of the family to whom it has belonged so long to sell it."

He spoke a little absently, as if to himself. Elsie drew her small, slight figure proudly erect.

"Sell it! You are mistaken, sir; Howard Farm is not for sale!"

"Pardon me, but you are misinformed," the man said, in the tone of one not accustomed to having his statements questioned. "I talked with the owner this morning, and he offered the entire place to me. I am thinking seriously of taking it."

"Did the owner give you his name?" Elsie's voice was plainly mocking. The stranger glanced curiously at her. The flush on her cheeks and the plain cardinal tam-o'-shanter that she wore gave her a girlish look. Professor Jerome Dare felt that he was being ridiculed by a child, and he replied coldly:

"The man's name is Hill, I believe." Suddenly the flush faded from Elsie's face, succeeded by the white heat of anger. Her voice was hard, defiant.

"It will be useless for you to think further of the matter. Howard Farm is not for sale, and any attempt to purchase it is an unwarrantable intrusion upon the family."

"Thank you. I took you for a school-girl, but now I am sure you must be the teacher from yonder little schoolhouse. You see I am so accustomed to the tone of authority in my own case that I recognize it in yours. Good afternoon," and, again lifting his hat, Professor Dare strode down the path Elsie had just ascended.

The girl did not look after him. Instead she plunged into the miniature forest. She walked rapidly, stumbling a little now and then, for her eyes were blurred by tears of vexation.

"How dared Tom offer the farm for sale?" she murmured to herself. "He knows that it cannot be sold without our consent, and we will never give that."

Elsie's father had been the last male Howard. Four daughters had come to

him. They had grown up in the farmhouse, surrounded by loving care and given the advantages of books and music.

Seven years before that March afternoon Mr. and Mrs. Howard had both died within a month of each other. At that time Elsie, the youngest daughter, was twenty, and Mary, the eldest, was thirty-five. All were unmarried save Hattie, the third sister, and she was the wife of Thomas Hill.

The property had been left in equal shares to the daughters. It had been the father's idea that it should remain undivided, but Mr. Hill had urged a settlement. At last Hattie's portion was set



"Sell it! You are mistaken, sir; Howard Farm is not for sale!"

off to her. This consisted of one hundred and twenty acres of good farming land. The part where the buildings stood belonged to the three unmarried sisters, Mary, Alice and Elsie.

Tom and Hattie had come to the old home to live. In the seven years four children had been born to the Hills. They and the Howard sisters lived as one family.

"Tom has let the farm run down," Elsie said to herself, as she hurried on under the leafless trees. "To be sure there has always been a contract, renewed from year to year. By that he is bound to leave the stock and tools as they were when he took the place. He has paid us our share of the profits, borrowing the money back again. That is not the worst, though. Tom and Hattie look upon us three as incapable of managing our affairs. We slave for them, or at least Mary does. And now Tom has offered the farm—our home—for sale."

By that time Elsie had reached the foot of the hill. A rustic bridge spanned the stream. Instead of crossing it the teacher sat down upon a log.

"Somehow the affairs of the Howards are in a snarl," she said aloud. "I am going to sit here and straighten the tangle, in my mind, if I cannot in reality."

"Why have we never married, like other women?" she went on after a moment's silent thought. "Now there is Mary. If she ever had a lover it was so long ago that no tradition of it remains. She is a queen among women. Perhaps her very nobility is one reason for her lonely life. Mary makes a virtue of self-sacrifice; I believe she enjoys it. Mother's health was not good for years, and she leaned upon Mary. Then Alice's lover died, and, although that was eighteen years ago, Alice has never regained her health since the long fit of illness that followed Carl Hunter's death. Mary has tended Alice all these years, and now she is a real slave for Hattie and the children."

Elsie lapsed into silence. Five minutes went by, then she resumed her half-whispered soliloquy.

"Why have I never married? I have never seen a man for whom I cared, and

I have thought that my future should hold something better and broader than that of most women. But I have let the years go by unimproved. When father and mother died I had had two years at college. If I had only gone back! But Alice was so bad that first year, and Hattie's health was poor; Mary needed my help. After that Tom and Hattie said so much against my going back that I began to teach here, and I have just stayed on. To-day I overheard Millie telling Belle that her mother said I was getting too old to teach school. It—it hurt. I wish—"

Elsie stopped abruptly. For five minutes she sat still, staring at the rushing water. Then she stood up, saying:

"If Tom and Hattie would only live by themselves! We three girls—or women, rather—have a right to live our own lives. Hattie does not appreciate what we do for her. We do too much; she would have been a better mother and a stronger woman if she depended upon herself. I sometimes think Alice might get well if she could have the quiet she longs for, and be roused to some interest in life. Then there is Mary. Poor dear! she deserves a little freedom from care. Well, in a way, I have had the easiest time of the three, and yet I chafe the most against this monotonous, self-centered life. We have dropped out of neighborhood interests, almost out of the church. I have just lived, comforting myself with my books. While I have been drifting the affairs of the Howards have gone still further awry."

Elsie reached up and pulled the red cap from her head. Her glossy black hair sparkled in the sunlight, and her face fell into strong, determined lines.

"I will do it," she cried. "Just how I don't know, but I will make over the Howards, not only the home-life and the financial affairs, but the real Howards—us. Our past to which we cling is outgrown and antiquated. Tom shall be made to loosen his hold here, and we three spinsters shall live—if not a new life, a renewed, a made-over one."

She put on her cap and started forward. Crossing the bridge, she passed through a field which gave access to the lane. Elsie made her way along this, soon arriving at the back door of the farmhouse.

The kitchen was empty. In the sitting-room Mrs. Hill sat before the fire that crackled on the brick hearth of the fireplace, listlessly turning the leaves of a fashion magazine. At one of the front windows Miss Mary Howard was seated at a sewing-machine, stitching a child's gingham apron.

Both women looked up to greet their sister. Mrs. Hill began at once:

"I don't see, Elsie, what you let Imogene come home with the children for. She fell in the mud, and Mary had to change all her clothes. I wish you would take better care of her."

"Teachers are not expected to carry their pupils back and forth from school," Elsie said sharply. "I have to have a few minutes in the day to myself."

It was a new tone, in fact an unmistakable declaration of independence. The sisters looked questioningly at Elsie, but all she said was:

"Where is Alice?"

"Lying down upstairs," Miss Howard answered. "Her head is bad to-day."

"Come up to her room, Mary. There is something I want to speak to you two about," and Elsie opened the stair door and began to ascend the steps.

She was not quick enough to avoid hearing Hattie say:

"What does ail that girl? Elsie was always too independent."

Miss Howard rose without a word. She went out to the wood-house and returned, carrying an armful of wood. As she

opened the stair door, Hattie exclaimed fretfully:

"I don't see any use of keeping an extra fire upstairs. Alice might just as well lie here on the couch. If you girls had to buy your wood you would be more saving."

"Well, we don't have to," was Miss Howard's unexpected reply. "There is wood enough on Howard Farm to last us three as long as we live, and we have a right to burn it."

Upstairs Elsie had found the invalid lying on a couch in the pretty sitting-room the three sisters used in common. Alice's chamber opened from it, and just across the hall each of the other girls had a room, although Mary's was shared by Imogene, the oldest one of the Hill children.

Alice Howard was a fair, delicate blonde. There was a strong resemblance between her and Mary. The older sister's face was stronger, and it was also lined by care.

"No worse, dear," Alice was saying as Mary entered the room. "I am just tired, and the children have been so noisy to-day. I will be glad when summer comes, and I can get out on the porch."

"It is coming, in more ways than one," Elsie cried, a jubilant note in her voice. "Girls, I have something to tell you. Tom has offered Howard Farm for sale."

"What? Are you sure?"

It was Alice who spoke. She sat up, pushing the gaily colored woolen blanket that had covered her to the floor.

Elsie turned to Mary. The elder sister stood erect, and the look upon her face gave the younger one courage.

Hastily Elsie told of her meeting with the stranger, repeating his words about the offer of the farm. Alice began to cry. "Oh, girls! I can't go away! You know Tom has always talked of our all moving to Lenox. His getting that five hundred dollars from his uncle's estate has started him again. And Howard Farm to be sold! Oh, dear!"

"It shall not be sold," Elsie declared. "I will never consent. Let Tom go to Lenox. I wish he would. Mary, say that you will not agree to our old home being sold."

"It shall not be done. Stop crying, Alice. Girls we have been ruled by Tom and have danced attendance on Hattie long enough. I wish we could be free to live our own lives!"

"We can, we will!" and Elsie held out a hand to each of her sisters.

## CHAPTER II.

The lamps were lighted that evening before the Hills and Howards sat down to supper. Mr. Hill had just returned from Lenox. He was a large, red-faced man, and that evening he seemed to be running over with good-humor and small jokes, a contrast to his usual air of self-satisfied importance.

The year-old baby, Madeline, was asleep. Mary poured the tea and waited on Imogene. Elsie dished the canned peaches and looked after Howard, the only boy of the family. Mrs. Hill attended to the wants of Janice, a plump little girl of three, and fretted about the children's manners and supper.

"Seems to me, Elsie, Imogene doesn't learn a thing at school but roughness. Mary, you know I don't care for rolls. I'd like a piece of toast."

"Well, the fire is just right for you to toast a slice if you want to," was Miss Howard's unexpected reply.

Hattie stared across the table in speechless bewilderment. Before she recovered from the astonishment induced by Mary's expecting her to wait upon herself, her husband began to speak with an uneasy assumption of carelessness.

"By the way, there is a fellow round here who wants to buy a farm. He's got his eye on this place, and I believe he would be willing to pay a good price for it, more'n it's worth."

"Then we could move to Lenox," Hattie said, momentarily forgetting her grievance against Mary in the delight of the vistas of ease and pleasure that Tom's words opened before her mental vision. "It does seem as if I couldn't stand the work of the farm another summer."

"This man is a college professor. His health has failed, so he's going to try farming. He's coming in the morning to talk—"

"Tom, what is the use of your thinking of such a thing?" Mary Howard asked tartly. "Howard Farm is not for sale, and will not be while we three live."

"I guess you are mistaken." Tom's mouth was full of cold boiled ham, so his speech was a little thick. "I've stayed here and slaved all these years, just to



humor you girls. Now we've a chance to sell, and we'll take it."

"I understand that you offered this man Howard Farm," Elsie said, her dark eyes shining defiantly. "Tom Hill, you can't sell the place; not one of us will consent, and it belongs to us."

"Not one of us," Alice echoed. They discussed the matter for half an hour. Tom coaxed. Then he blustered, and, at last, rising from the table, said: "Well, Hattie and I will sell our part. We are all going to move to Lenox, just remember that. I've bargained for a house there, a new one. I shall expect you girls to pay half for it. That's no more'n right, and the deed might as well be made out to the children. We'll move inside of a month," and Tom picked up his hat and strode out of the house.

Elsie opened her lips for an angry speech. Mary shook her head, and the younger sister held her peace, breaking the silence only by the reckless rattling of the china she was gathering up.

Later in the evening Hattie introduced the subject of the sale. The sisters refused to retreat from the position they had taken; the farm was not for sale.

The next day was Saturday. So it chanced that when Jerome Dare rang the bell at the farmhouse it was Elsie who opened the door.

Her face reddened at the sight of the man whom she had met the night before. A sense of indignation took instant possession of her. He had not only aspired to buy Howard Farm, but he had tacitly reproved her for daring to stand up for her rights.

"Mr. Hill is at the barn," she said in response to his question. "If you will step in I will call him."

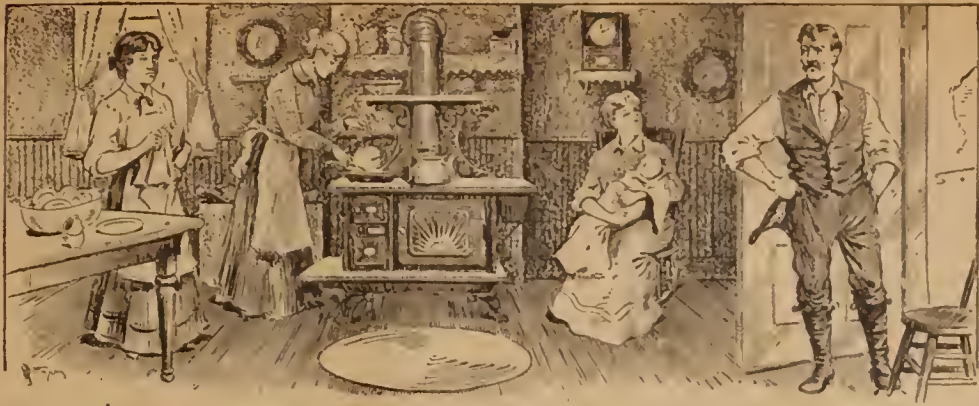
"Thank you, but I will seek him at the barn," and politely lifting his hat, Jerome Dare disappeared around the corner of the house.

His interview with Tom lasted an hour. At its conclusion, Tom entered the house, a frown on his brow.

Alice was upstairs, but the rest of the women of the family were in the kitchen. Mary was frying doughnuts, Elsie washing dishes, while Mrs. Hill sat by the stove, the baby in her arms.

"Well, Hattie, I've sold your land," Tom began. "It's a pretty return for all I've done for the rest of you—to interfere in business, something you don't know a thing about. This man said he had been told that I could not sell the homestead, so I see that my authority has been put down before folks."

To the surprise of all Elsie laughed merrily. With a big tureen in her hands she faced round to her brother-in-law.



"Never mind fussing about the work . . . There won't be so much to do for one thing, and I'll keep you a girl!"

"Tom, do drop that injured tone. Your authority! One would think we were infants, instead of being middle-aged women. I am sure that it has been to your interest to stay here and work the farm. Now that there is dissatisfaction it is better for you to go. It has never seemed to occur to you and Hattie that the rest of us have a right to do as we please."

"As you please! Three helpless women!" Tom muttered. "Now I'm going into the livery business at Lenox, and how you girls expect me to run out here every few days to see to the farm is more'n I can tell."

"We can attend to it ourselves," Mary said, lifting a fat brown cake from the boiling fat.

"You tend to the farm? A heap you know 'bout it. You'll always be teasing me to bring you out here, and my horses' time will be worth money."

Elsie looked questioningly at Mary who bowed her head. The younger sister said: "Tom, we might as well understand each other one time as another. We have no idea of leaving the farm. Mary, Alice, and I intend to stay here in our own home."

"I'll not stay; there's no use of your coaxing," Tom cried.

"We don't want you to stay. Nay, hear me out. The farm is not prospering under your care, and the work of the house is doubled by the children. Then I believe that all this noise and excitement are bad for Alice."

"But you can't stay here alone." Tom was becoming really frightened. "Why, you would let things all run down."

"That is our affair. We intend to stay here and to carry on the farm. It is useless for you to say more; nothing will change our plans."

"And we have a perfect right to do it," Mary added.

Mrs. Hill began to cry. "The idea of you girls talking like that! How am I to get along without you, especially Mary? And the children—don't you owe them anything?"

"Mary is neither the children's father nor mother," Elsie remarked sagely, going back to her dishwashing. "We love the children, Hattie, and we love you, but you have a husband to care for the family, and we—well, we have borne the burden as long as we can."

"Never mind fussing about the work, Hattie," Mr. Hill ordered in an authoritative tone. "There won't be so much to do, for one thing, and I'll keep you a girl. But when Mary and Elsie come begging to share our home, then I hope they'll remember what they've said this morning. Now that's all I have got to say 'bout it," and with evident displeasure he marched back to the barn.

All day the atmosphere at Howard Farm was charged with the electricity of friction. Mary feared that the excitement would prostrate Alice, but Elsie noted, with a growing hope for her sister's recovery, that the invalid came downstairs for all her meals and ate more heartily than usual.

"I believe even Alice can be made over," Elsie said to herself. "Why didn't I think of this before?"

In the early twilight of that evening Elsie stepped out of the kitchen door and made her way across the back yard to where the tenant house stood. It was occupied by Bert Smith, a newly married man, whom Tom, before he had thought of going to Lenox, had hired for the season.

"Come in," said Patty, Bert's pretty wife, when she opened the door in response to Elsie's knock. "Yes, Bert is here. We are both feeling a little blue this evening, for Mr. Hill has just been

telling Bert that he'll not want him this summer."

"Two months ago I wouldn't have eared," Bert said, an aggrieved tone in his voice. "I declined two good offers to stay on here, and now the other places are all filled."

"Will you stay here, Bert, working for my sisters and me instead of for Tom?" Elsie asked. "Now you may say that we don't know much about farming, but we have lived on a farm all our lives. Mr. Maynard will advise us, and I know that we can trust to your good judgment in many ways."

Bert was delighted. They talked for a long time. Elsie frankly said that she and her sisters hoped to make many improvements on the farm. Patty had formerly been a pupil of Elsie's. The young wife was very fond of her old teacher, and said as Elsie rose to go:

"If you need any help at the house this summer, Elsie, I'll be glad to come. You see I have so little to do. I want to do everything I can to help on the day when we will have a farm of our own."

"We will have to have another man, or perhaps a boy would do. Would you be willing to board him, Patty?"

"Oh, I would be glad to do that."

"Patty's brother, Fred, wants a place," Bert hastened to say. "Fred is a good boy, and he and I could carry on the work, with an occasional day hand."

"Ask Fred to come up to the house and see us," Elsie said.

That evening, in the seclusion of the upper sitting-room, Elsie told her sisters what she had done. They approved of her engaging Bert, but Mary said doubtfully:

"We have always boarded the farm help, Elsie, and, with the children gone, there will be much less work."

"You are going to do less work, Mary. Tom has neglected the farm, yet our share of what he did make has been ample for all our wants, and we have always paid half of the household expenses. We will farm successfully and yet have a little leisure. I am not sure that I will teach next year. I will read, and you shall take up your piano practise. When Alice is a little stronger she shall resume the drawing and painting of which she was once so fond."

Mary looked puzzled. "Elsie, I wonder if I have lost the power to really live," she said musingly. "Somehow life seems worn out to me."

"There is good material in the life of the Howards yet," Elsie declared with a whimsical smile. "It is going to be made over."

[TO BE CONTINUED NEXT ISSUE]

The Baptizing of Aunt Hannah

FROM early youth Aunt Hannah had what she called a "powerful strong hankerin' arter de chech." But strange to say, she grew to womanhood without affiliating with any denomination, although she never missed a Sunday from services. When pressed by the Rev. A. Jackson Johnson, pastor of the Mount Nebo Baptist Church, for the rea-

banks of the river. The audience sang, "Come Down to de Ribber Whar de Lilies Grow." Parson G. Washington T. Jefferson Jones, of Mount Gilead congregation, offered up a prayer, the crowd parted, and the Rev. Johnson appeared leading Aunt Hannah down to the water. She was larger than ever, and as she passed one enthusiastic sister exclaimed, "Lawsee, it am jess shore a caution how Sistah Hannah hez picked up flaish since she tuck on 'ligion." Aunt Hannah approached the water with an alacrity strangely at variance in one who had lately dreaded it so much.

The river shelved off precipitately from the shore, and the Rev. Johnson, with great caution, led his charge to the right depth, supplicated the divine blessing and attempted to perform the act of immersion. Again he tried it, and nettled by the laughter that greeted his failure, he threw more energy into the third attempt. Alas! too much energy, for, slipping, he and Aunt Hannah were in an instant in deep water, floating rapidly into the current. Now, the Rev. Johnson never having acquired the art of swimming, was, as most persons would have been under similar circumstances, highly excited, and clung desperately to Aunt Hannah. She, for some providential reason, did not sink, and this inspired the man of God to encroach still further on the prostrate form of the floating sister, and by the time they rounded the bend in the river he had attained a fairly comfortable seat. Then his marvelous deliverance dawned upon him, and his gratitude vented itself in his favorite old camp-meeting song, "Tis the Old Ship of Zion."

They were rescued a mile or so down the river, and to this day the negroes of Milledgeville will tell you of the miracle wrought at the baptizing of Aunt Hannah. But Aunt Hannah has herself remained strangely reticent on the subject, and when someone said to her that Tom Carter had intimated that a part of her baptizing costume consisted of four rather large life-preservers, she only replied, "Lawd, honey, how you do talk!"

LONDON KNIGHT.

His Self-Respect

THE course of the Camden golf-links, between the fourth and fifth holes, crosses the track of the T. H. and L. railroad. Accordingly, should a train be passing when you arrive at this stage in the game you must either wait for it to pass or use a lofting-iron. It was under such a necessity that H. I. Millard, general manager of the T. H. and L., found himself one afternoon recently, while playing a close game against the bogie score.

Freight-train number eleven was coughing up the heavy grade, and Mr. Millard, after teeing his ball, stood waiting for the train to pass. The last car drew opposite the tee, and Mr. Millard commenced the usual limbering-up process preparatory to a drive.

In the lookout of number eleven's caboose sat Conductor Frank Burke, smoking and keeping a watchful eye on familiar landmarks along the track. In most of his views Burke is as broad as the gage of the T. H. and L., but his opinion of golf and golfers is not to be expressed in polite English. Mr. Millard's pink coat caught his eye. Instantly the pipe came from his mouth, and leaning half-way through the window of the lookout he bawled in a voice that would have carried an order the length of his train:

"Hi, there, you feller in the red coat! Hit 'er between the eyes! Knoek 'er seven ways for Sunday, you bow-legged organ-grinder's monkey!"

Mr. Millard straightened up, took a note of the caboose number on his score-card, and made his drive. Burke resumed his pipe, and chuckled every time he thought of the monkey in the red coat.

When number eleven reached Logan, Burke was handed a telegram ordering him to turn his train over to another man and report at once to the division superintendent at Camden. He took the first train back, and presented himself next morning as instructed.

"Mr. Burke," said the superintendent, "the general manager wishes to see you in his private office." And thither Burke took himself, his curiosity not unmixed

with apprehension, for the color of the general manager's carpet is a thing no trainman likes to see.

"Ah, good-morning, Mr. Burke," said Mr. Millard. "You were in charge of number eleven yesterday, I believe?"

"Yes, sir," replied Burke.

"Quite so. Well, you will doubtless remember that you did me the favor of offering some advice in a game of golf I was playing. The rules of the game, Mr.



"Hi, there! Knoek 'er seven ways for Sunday!"

Burke, demand that no one shall address the player while he is making a stroke. Now, I wish to know which you prefer, to apologize or to take a thirty-day lay-off?"

Burke's jaw dropped.

"Was that you, Mr. Millard?"

"It was."

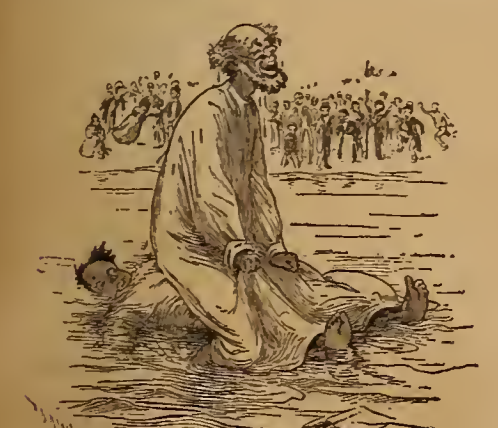
"That feller in the red coat and knickerbockers?"

"It was I, Mr. Burke."

Burke looked sorrowfully at his chief for a moment, and then, in the tone of one who has just seen a cherished idol shattered, said:

"H. I. Millard, general manager of the T. H. and L., in a red coat and knickerbockers, knockin' a little ball 'round a pasture-lot with a shinny-club! Mr. Millard, I'll take the thirty days!"

J. D. BLYTHINE.



"He had attained a fairly comfortable seat"

son why she "had nebber tuck herself into de fole," she evaded the question and made indefinite promises.

However, finally Aunt Hannah confided to "Marse Tom," the son of her old master, that she had never "jined de chech 'cause yo knows honey, I's powerful skeerd ob de watah, an' yit if I don't I's jiss es good es under old Sating's pitchfork." What further transpired at the conference was unguessed at the time, but at the next meeting at Mount Nebo, when the doors of the church were opened, Aunt Hannah stepped down the aisle with amazing briskness for one who tipped the beam at the two-hundred notch, and lost no time in having her name enrolled as a member of the flock.

On the following Sunday she was to be baptized, and when the hour arrived for the ceremony standing-room was at a premium for several hundred feet along the



## Sack of Flour that Sold for Nearly a Million Dollars

HERE is the picture of a sack of flour that probably sold for the highest price of any package of breadstuff in the world. It was known as the Austin Sanitary Flour. In 1864 fifty pounds of it brought nearly \$1,000,000, and it all went to the famous Sanitary Commission, organized in Boston by Dr. Henry W. Bellows, for the humane purpose of relieving the sufferings of Union troops on Southern battle-fields and in the hospitals of the country.

What makes the picture of especial interest at this time is that the owner of it, who was one of the instigators of the movement that led to the realization of a stupendous amount of money from an unimportant occurrence, is still living at the age of seventy years. He is now the county surveyor of Dekalb County, Illinois, and his name is S. T. Armstrong.

During the war, Mr. Armstrong was in Austin, Nevada, and the town was



THE SACK OF FLOUR THAT SOLD FOR NEARLY ONE MILLION DOLLARS

about to vote on the question as to whether it would incorporate and elect a set of city officers. The people were divided on the proposition, and there was a queer election wager as to the outcome of the election. R. G. Gridley was on one side, and one Herrick on the other. Gridley proposed that if Herrick's side won, Gridley would carry to the cabin of Herrick, a mile distant, a sack of flour. A brass band was to accompany him, and he was to keep step to the music of "Old John Brown." If Herrick's side lost he was to carry a sack to Gridley's place, and the music should be "Dixie." Gridley had been a Southern man, but was a good and loyal citizen of the North.

Gridley's side lost, and when it came time for him to make good on his election wager there was a great outpouring of the people to witness the odd event. The people took up the air of the old song until the cañons were made to resound with it.

When Gridley delivered the flour, he offered Herrick \$25 to sell it back to him, and Herrick said that he could have it, and that he would turn the money into Dr. Bellows Sanitary Commission fund for the good of humanity. It was then that Mr. Armstrong thought it was a good time to push a good thing along, and he raised Gridley's price for the flour five dollars. A bystander bid \$35, Gridley raised it, and Herrick raised Gridley, until the price had reached \$50. Then Armstrong proposed that the band should play "Dixie," march to the principal corner of the town, and put up the sack of flour for more bidding. By the close of the day \$6,600 had been raised from the repeated sales of the flour.

Then Gridley offered to give three months of his time in making the rounds of all the principal towns in Nevada and California to sell the flour over and over again, all of the proceeds save his expenses to be turned into the Sanitary fund. The Wells, Fargo & Co. stage-line gave him a pass that carried him over all the lines in that part of the country. Gridley went to Virginia City, Silver City, Gold Hill, Ophir, Esmeralda and to scores of other towns. A great rivalry sprang up among the towns to outbid each other and in a short time over \$300,000 had been collected from the oft-repeated sales of the flour. The selling continued, all of the money be-



## Around the Fireside

ing sent to the commission, for railroads, hotel-men, stage-companies and others charged Gridley nothing.

Finally the flour was put into a buckskin bag and shipped to the Sanitary Fair at St. Louis, where a big admission fee was charged for anyone to get a look at it. After the close of the fair the flour was mixed with a great quantity of less famous breadstuff and baked into ginger snaps. They sold for \$1 each, and people took them by the dozen at that.

Dr. Bellows sent to the battle-fields and hospitals more than \$15,000,000 in supplies and \$5,000,000 in money, and it is estimated that this Austin sack of flour raised nearly \$1,000,000 of it.

Mr. Armstrong, who is one of the best-known citizens of northern Illinois, and who, during the war, rendered efficient service on the Western plains, relates the incident as if it had happened yesterday.

The accompanying picture is a copy taken from the original photograph showing Gridley with the famous half hundred-weight of flour on his shoulder. At that time and in that country flour was the great medium of exchange, fifty pounds being worth about \$15 in gold.

J. L. GRAFF.

## Evolution of "The Devil's Lane"

ONE of the greatest disturbers of the peace and happiness of neighbors since the days when Abram and Lot separated their flocks in Bible times have been line fences. When the quarrel became so bitter that no compromise could be effected the result usually was that each landowner built his own fence on his own land, leaving a narrow strip of ground between each fence. Sometimes this was used jointly for the passage of cattle to and from pasture, but usually was permitted to grow up with briars and bushes. In some way this particular strip of ground was appropriately given the name of "The Devil's Lane."

In the early days of this country these fences were invariably made of rails and laid up "worm" fashion. That necessitated a great loss of land and a needless waste of timber. As time went on and timber became scarcer and land more valuable the place of the "worm" fence



"DEVIL'S LANE"—A FAMILIAR SCENE OF THE OLD DAYS, AND STILL TO BE FOUND IN SOME PARTS OF THE COUNTRY

was taken by the board fence or stake-and-rail fence, and the strip of intervening land narrowed more than half. In recent years another step in the evolution has been taken. Wire fences are now taking the places of board fences, and the strips of ground allotted to the Bad Man of the universe have been narrowed to mere paths.

In some states the law does not compel the farmer to fence except against his own stock. In many instances these fences under these laws have entirely disappeared and no longer advertise to the world the animosity of neighbors. In some places the old lane is now but a well-beaten and cool path between farms, often leading to a schoolhouse or a place of worship. In these cases the hatred between neighbors may be as

intense as ever but it is not advertised to the world.

The writer has personal knowledge of a county in Ohio where there were at least a dozen of these spite lanes twenty-five years ago. Now but one can be found, and it is there more from force of habit than from the hatred existing between adjoining neighbors—a hatred engendered and nursed by the forefathers of the present generation.

The disappearance of these lanes cannot be attributed wholly to an improvement in the morals in the people. There is an element of selfishness in the matter. It costs too much to maintain the fences, and the loss of the use of the land so occupied is too great to be tolerated by the children of parents who started a quarrel in the dim past.

CHARLES A. HARTLEY.

## Rivalry Among Nations

THE rivalry that seems to exist between nations with regard to having "the largest" of things is interesting. England floats the greatest fighting machine in the world in the "Dreadnought," and then the American papers declare that the United States, not to be outdone in this respect, will build a still larger and more powerful one. Now then, Italy comes forward with the declaration that its new fighting monster will put the English and American boats out of the running.

Germany hasn't proclaimed its intention to outstrip the above along the line of fighting machines, but declares that by the end of 1907 the port of Hamburg will possess the greatest floating dock in the world. It is now under construction in the shipyard of Messrs. Blohm & Voss, at Hamburg, and is said to have an accommodation capacity of 35,000 tons. Its length will be 520 feet, so that the largest warships and ocean liners will be able to use it.

## The Valparaiso Earthquake

SAN FRANCISCO'S awful horror has almost been repeated in the Valparaiso earthquake. As in San Francisco, fire broke out in the buildings that the shock had thrown down, and the same expedients to preserve property and check the

of which a considerable part of the city of Valparaiso is built.

Early in the present year there were a number of earthquake shocks in Chile, creating much alarm. There were thirty slight shocks on March 27th at Raucagua in a single night, and prolonged and severe earthquake shocks were felt at Valdina on April 24th. Little damage was done, but the alarm of the populace was great.

A dispatch from Valparaiso on May 7th announced that a violent earthquake shock was experienced on May 5th at Arica, a maritime town of Chile, in the province of Tacna, the principal port through which the foreign commerce of Chile is carried on with Bolivia. The whole region was visited by a severe earthquake in 1868.

The Republic of Chile covers about one half of the western coast line of South America. It is 2,300 miles in length and has an average width of 125 miles. It is a mountain range bordered on the east by Argentina and on the west by the Pacific Ocean.

The chief cities of Chile are Santiago, the capital, with a population of about 300,000; Valparaiso, about 150,000; Concepcion, about 50,000; Talca, about



THE LATE ALFRED BEIT

40,000, and Iquique, Chilean, Valdivia, Copiapo and Coquimbo. The population of Chile consists chiefly of whites of Spanish descent, Indians and half-breeds. The pure Spaniards constitute a minority. The Spanish language everywhere prevails.

## The Late South African Diamond King

MR. ALFRED BEIT, the famous diamond king and South African financier, died recently in England. Interest is attached to his death from the fact that he is known to have been one of the wealthiest men in the world. In a very few years in South Africa he amassed his great fortune under circumstances of extraordinary interest.

Beit came of a Jewish family, was born fifty-three years ago in Hamburg, and went to South Africa when a young man. Early in his South African career he became associated with Cecil Rhodes, who, with "Barney" Barnato, succeeded in cornering the diamond industry.

He has been at Johannesburg but three or four times, and on one of these visits he gave a great ball to three hundred friends, one of the most sumptuous entertainments ever seen, where every lady present was given a valuable diamond as a souvenir.

Beit was said to be much averse to the marriage of young men in his employ. At one time his secretary asked for a holiday to get married. Mr. Beit replied: "If you get married I sha'n't want your services any more. You can't then serve me as I want to be served, and you can't look after your wife as you ought to if you serve me properly. Come in later and let me know what you are going to do." Next day the secretary explained that he had determined to wed. His services were dispensed with then and there, but just before the wedding Mr. Beit sent for him, wished him success and handed him an envelope, not to be opened until after the wedding. It contained a check for \$5,000 and a note admiring the young man's courage.

The actual figures of Mr. Beit's wealth are probably known to no man, although those near to him place his wealth at upward of three hundred and seventy-five millions.

The executors of the deceased diamond king have issued a statement of public bequests made by him. These total a few thousands short of ten million dollars in money and stocks, in addition to valuable art works, paintings and statuary. Large sums are left to relatives, friends, clerks and servants. The largest bequest is \$6,000,000 to endow the Cape to Cairo railway and telegraph scheme.



**Where It Was Done**

Joe Bing, he cut ten cords o' wood  
From rise to set o' sun;  
He cut it, an' he piled it, too,  
Yes, sir, that's w'at he done.  
To cut ten cords of wood, I vow,  
Is one tremendous chore—  
Joe Bing cut his behind the stove  
In Luscomb's grocery store.

Joe Bing, he cut eight load o' hay,  
I swan, an' raked it, too,  
An' in twelve hours by the clock  
He was entirely through.  
He could, I guess, before he slept,  
Cut jes' as many more—  
He cut it where he did the wood,  
In Luscomb's grocery store.

Joe Bing, he plowed four acres onct,  
He plowed it good an' neat;  
An' 'fore the sun had near gone down  
The job was all complete.  
The hosses never turned a hair,  
Wa'n't tired ner leas' bit sorc.  
He plowed it all in one short day—  
In Luscomb's grocery store.

Joe Bing, he made five dollars onct  
By simply pickin' hops;  
He done it all in jest a day  
With time for sev'ral stops.  
He could as well a-kept it up  
A dozen days or more,  
Where was it done? The same ol' place—  
In Luscomb's grocery store.

—John D. Larkin.

**Ten Thousand Dollars for a Stamp**

IT WILL be surprising to people not of the postage-stamp-collecting cult, to know that an American collector has offered the sum of \$10,000 for a single copy of a five-cent postage-stamp. The stamp desired is one similar to the Annapolis (Maryland) stamp on the original envelope, and like the one in the collection of the Earl of Crawford, which is said to be the only specimen of its kind in the world. This would make the Annapolis stamp the highest priced in the world. Next to it in point of value is a specimen of the twopenny Mauritius stamp, for which the German Postal Museum is said to have paid \$9,022. After this ranks the one-penny Mauritius stamp, for which the Prince of Wales not long ago paid \$7,200.

**The First Express Business**

WORKING sixteen hours a day in the office of the Boston & Worcester Railroad, William Frederick Harden, then a young man, went to New York in 1839 for a short rest. During Harden's stay in New York City, the thought that he might make a living doing errands between New York and Boston for people, occurred to him. Harden, believing his idea a good one, bought a couple of extra large carpet-bags, and announced that he would transport parcels between New York and Boston, or between intermediate points, at very low prices. Harden's business prospered, for the railroads reached out in all directions, taking the places of the old stage lines. The growth of the Harden business made it necessary for the railroads to make special provision for the transportation of such goods. In 1840, Harry Wells, who later became one of the founders of Wells, Fargo & Co., was Harden's clerk. Wells suggested to Harden the idea of pushing his business westward. Harden was doubtful, but Wells, confident, continued to put the idea up to Harden. With the western idea thoroughly worked out, Harden saw another chance of helping new arrivals in this country, and at the same time of developing the country. He accordingly arranged for a low rate of transportation on the Erie Canal, with the result that he immediately built up a large business of transporting immigrants to any part of the West. Harden died at the very early age of thirty-three years. One cannot realize the great system of express transportation Harden started with his two carpet-bags. More than 35,000 people are now engaged in this work alone in our country, and the \$600 that represented Harden's first year's profits, have jumped into the tens of millions.

**The Moon Necessary**

IN a New England town there is a medical society said to have been in existence for the past sixty years, and which has a custom of meeting on the Thursday before full moon. Recently, says the New York "Sun," some of the young members tried to change the time of meeting to the third Wednesday of every month. Three of the oldest members rose up and protested. They gave the reason for the peculiar arrangement. "When this association was formed," said one of them, "there were no electric

lights and good roads the way there are now. The society took in the whole county, and it was often a difficult matter for the doctors who lived in the country to drive home after nightfall.

"So we called the moon to our aid and set the date for the Thursday before the full of the moon. It is bright moonlight at a seasonable hour then, and the doctors could see their way home.

"I know there is no necessity for such an arrangement now, but this will seem like a new society if we do not meet the Thursday before the full of the moon."

**Jiu-Jitsu at Annapolis**

THE introduction of the Japanese art of self-defense is to be continued at least for another year at the United States Naval Academy at Annapolis. Rear-Admiral Sands, Superintendent of the Naval Academy, doubted the value of jiu-jitsu in the navy, and recommended to Congress that the experiment at Annapolis be abandoned. President Roosevelt's hand is shown in the order to continue the course at the academy. Recently it is understood that the course of instruction was to be dropped, on the ground that the experiment had been sufficient.

The President, however, is known to be an enthusiastic admirer of the art, he having taken a number of lessons himself a couple of years ago, while the Russo-Japanese war was on, and by putting a professional wrestler of heavy build against a little Japanese expert, with disastrous results to the American. So, determined that it shall be given a thorough trial, he has ordered that it be continued through the next term.

**Our Highest Mountains**

THE United States dictionary of altitudes, in its fourth edition assigns the elevation of Mount Whitney as 14,502 feet, while in the third edition it was 14,898 feet (Bulletin 1905; p. 734). Mount Rainier's height is given at 14,363 feet, the earlier figures having been 14,526 feet. Mount Whitney leads in elevation among our mountains south of Canada, but Mount Williamson, in California, according to the dictionary, is only two feet lower. Colorado has twenty-seven mountains over 14,000 feet in height, very few of which are known by names to the general public excepting Pike's Peak, Holy Cross Mountain and others which, owing to accessibility, history or outlook, have especially attracted attention. Elbert Peak, 14,421 feet, is the culminating summit in Colorado. California has eleven mountains over 14,000 feet high. Eight of Alaska's summits rise above 15,000 feet, with Mount McKinley, 20,464 feet, and St. Elias, 18,024 feet, in the lead.

**Who Owns the Farm?**

We bought the house and the apple-trees,  
And the spring where the cresses grew,  
The old stone wall and the slope of grass  
All studded with violets blue.

We bought and paid for them honestly,  
In the usual business way;  
'Twas settled, we thought, yet there are some  
Who dispute our title each day.

A phoebe came to the eastern porch,  
Where I loitered one sunny day,  
And told me that porch was hers, not mine,  
Just as plainly as bird could say,

That she didn't want me prying there  
Into all her family affairs,  
And asked me by pert little gestures,  
If I had no family cares.

The vireo perched high above me,  
' In the great branching apple-tree,  
And said, "I am here, I'm here, I'm here."  
As though 'twere important to me.

And then he most saucily asked me,  
"Who are you?" in such an odd way  
That I felt quite like an intruder,  
And I hadn't a word to say.

A pair of robins have made their home  
In that very same apple-tree,  
And they plainly tell me every day  
That they don't care a straw for me.

And a pair of chippies think the limbs  
Are exactly the proper height;  
They've been looking round some time, I know,  
For a suitable building site.

What right have we in this place, think you,  
When the crows make free with our corn,  
And the brown thrush says "good-by" each night,  
And the blue jay calls us at morn?

The chimney belongs to the swallows,  
The piazza's owned by the wren.  
We'll take care to see our title's clear,  
When we purchase a farm again.

—Kate M. Post.

**Home-made Gas-Light for Country Houses**

TAKES about one hour's work per month. After that you merely turn a tap whenever you want light, touch a match to the burner, and, presto—light.

Yes, brilliant, beautiful, white light, too. A light that spreads all around the room like daylight.

A light that gives sparkle to every polished article it falls on—gleam and glisten to white table linen—and a genial, cheery glow to everything it illuminates.

Just like putting varnish over a faded picture—this glorifying Acetylene Light.

Now that isn't mere word-painting, I want you to know, but cold fact, which I'll prove up to your satisfaction or no pay.

\* \*

Wouldn't you like to get rid of the everlasting smell of Kerosene or Gasoline in your home?

Wouldn't you like to know that never again would you have filthy Kerosene Lamps to clean and fill, wicks to trim, chimneys to wipe and the permanent dread of fire?

Wouldn't you like to know that in every room you had a pretty brass fixture firmly attached to ceiling, or wall, where it couldn't be tipped over by the children—where it was never in the way, and was always ready to touch a match to when you wanted light—little or much?

Wouldn't you glory in the absence of soot, smell or danger?

Wouldn't you like your visitors to find in your home that smart "city style" which Gas-lighting gives, with that beautiful, soft radiance shining down from the ceilings, where it does not get in your eyes like the glaring light of sooty, smelly Kerosene Table Lamps?

\* \*

Well, Madam Householder, you can have all these at less cost than Kerosene costs you now, when once installed.

In about two days' time an eight to ten room house can be completely fitted, from cellar to garret, with beautiful brass chandeliers and globes, complete piping, and a reliable generator that is absolutely



safer than any Kerosene Lamp or Gasoline Light.

All this, including the labor, for about \$150 complete.

Not a pipe will show on your ceilings or walls, except in the basement, and not a thread of your carpets will be cut or soiled in the installation.

This Acetylene Gas Plant will be good for twenty years' use, which means about \$8 a year for all the luxury, time-saving, comfort, eye-sight-saving, smart effect and after-saving on Kerosene.

From the day your own Acetylene Gas Plant is installed it will cost you one-third less for the most beautiful, softest and whitest Light than it ever did for the same candle-power with smoky, ill-smelling dangerous Kerosene or Gasoline.

\* \*

Now just drop me a line to-day, stating how many rooms you've got, and I'll tell you just about how much it would cost to light them properly with this beautiful white light that's like putting varnish over a picture.

And, I'll send you "Sunlight-on-Tap," a book full of mighty interesting things about House, Store and Hotel Lighting.

Write me to-day, giving number of rooms.

"Acetylene E. Jones,"  
7 Adams Street, Chicago, Ill.

**To Insure Jellies and Preserves**

Your jellies and preserves will keep perfectly if you seal each glass or jar, with a thin coating of Pure Refined Paraffine. Easiest way in the world to keep fruit, and the surest. Simply pour a little melted paraffine over the contents of the glass, or, if it is a jar, dip top in melted paraffine.

**PURE REFINED PARAFFINE**

is odorless, tasteless, acid-proof, and will positively exclude outside air from fruit jars, or jelly glasses. Useful in numberless ways—in the laundry, when ironing, to make wood tubs harmless to butter, as a wood filler, a floor wax, etc.

Sold in cakes of about one pound weight by all dealers—full directions with each cake. Write for attractive little folder telling about Pure Refined Paraffine and its many uses.

STANDARD OIL COMPANY.



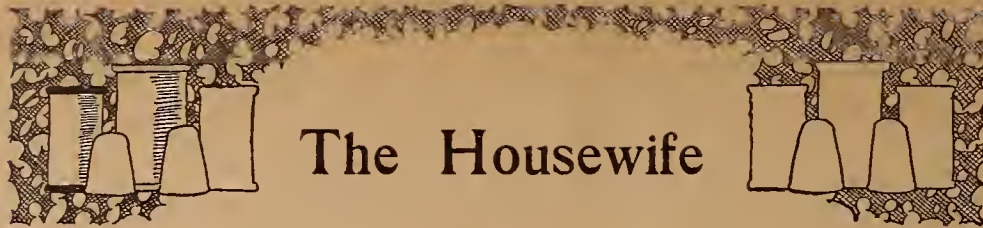
When writing to advertisers, tell them you saw it in "Farm & Fireside"



### The Value and Use of Simple Materials in the Home

BY MABEL TUKE PRIESTMAN

It is a far cry from the old Colonial days when beautiful mahogany furniture, hand-woven rugs, and homespun wearing apparel were all made in the home, and usually by the women of the family. These things bespoke a quiet dignity far removed from the cheap make-shifts of to-day. With the advent of highly-polished oak furniture, sham lace curtains, onyx-topped tables, and silk ties has come a love of display and a preference for ornate furnishing. This is wrong, and the sooner the housewife returns to simple and useful things the better it will be, not only for the beautifying of our homes, but for the strengthening of our characters. How many beautiful possessions find their way to



## The Housewife

baskets and three and one half yards of twelve-and-one-half-cent chintz. A card-board top has been covered with chintz and sewn to the edge, and makes another kind of extra table. The same idea can be carried out for a work-basket by lining the top peach basket with sateen and adding a liberal supply of pockets, and having a lid made which is larger than the top of the peach basket. This must be neatly covered on both sides with chintz and finished off with a ball fringe. A couple of buttons and elastic holds the lid in place when the work-basket is not in use, and when the lid is thus attached the peach baskets also answer the purpose of a table.

An old-fashioned ironing table can be used in several ways. It is very pretty when painted white, or it can be painted a pretty shade of green. If used for a porch it can remain in position as a settle, and when a table is needed it can be made to answer its original purpose. It is also useful as a settle in either a dining-room or a hall. I have known a couple of such tables to be used in a country cottage. When placed together they formed the dining-table for the family, but, as the dining-room had also to serve as the children's play-room, the tables were usually seen as settles. Such pieces of furniture are found in most country homes, or can be picked up for less than a dollar, second-hand.

A church pew is not to be despised. These can be used in large halls or against the wall of a house on a porch. They can also be used as settles by the fireside, but as most pews are somewhat long, it is best to remove one arm and cut off the side and back until it is the right length, when the side can be replaced.

Velvet and silk cushions are out of

place with simple furniture of this kind, and here comes an opportunity to make use of everyday articles. Hand-woven floor-cloths that can be bought for ten cents apiece make charming pillow-covers, and when some denim or linen has been applied as a decoration, the effect is very picturesque.

When the home is the happy possessor of a hand-loom nothing is prettier than pillow-covers made from the worn-out

small piece of material and binding it round with linen thread. For the small specks a tiny little piece is taken up, while for the larger spots a bigger piece will be needed. When these are tightly tied in place the muslin is dyed. When the right color is obtained it is hung out on the line to drip, and when perfectly dry all the pieces of linen thread are removed and the muslin is damped and ironed in the usual way. A beautiful and artistic drapery will be the result, and charming curtains and portières and bedspreads can very easily be evolved, while simple pillows and table-covers leave almost nothing to be desired.

If such things were made on the farms, they could be disposed of for high prices to summer boarders in the vicinity, as people have paid as high as five dollars for a pillow square not even made up.



BURLAP CAN BE USED FOR A DADO, AND MAKES A GOOD BACKGROUND FOR OLD MAHOGANY



PEACH BASKETS CAN BE UTILIZED AS A RECEPTACLE FOR WORK, WHILE AN IRONING TABLE CAN BE MADE USEFUL IN MANY WAYS

junk-shops and country sales, where they are gradually picked up and brought to the homes of the rich, where they are put in places of honor amidst their new environment.

How much more suitable do the old-time rag carpets seem on the well-scrubbed floors of the farmhouse than a Brussels or pile carpet of loud pattern and crude coloring. Quaint chintz hangings that can be laundered are more appropriate than velour curtains, with monotonous lace curtains at the windows. Five-cent cheese-cloth would be infinitely prettier, while white swiss or scrim gives a fresh and dainty appearance, suggestive of the country rather than the cheap shams of the city.

What a beautiful thing is an old Windsor chair, with its delicate lines and good proportions. It is most comfortable to sit in, and adapts itself to its surroundings, whether it is in the kitchen, parlor or porch. With a coat of green paint it seems at home on the piazza, while, with two or three coats of white paint and a prettily covered cushion, nothing more appropriate could be wanted for the parlor, while the old stained hickory or oak can be left in its pristine beauty for the kitchen. A ladder-backed chair has a charm which few can resist. True they are not very comfortable as lounging chairs, but for bedrooms and as wall chairs their straight and simple lines are always pleasing.

Our illustration shows a simple corner made from burlap, and an old farmhouse chair with a carelessly arranged group of flowers in a green-glass bottle on a little table. Flowers are so attractive when thus arranged. A few placed in a ginger-jar or a rose-bowl are so much prettier than a pressed-glass vase containing a quantity of flowers tied firmly in a bunch, with hardly any green foliage. Trailing vines give a beautiful touch when hanging from a vase placed up high. Ivy lasts a long time in water, and gives a cool and beautiful touch. The Wandering Jew is a beautiful plant which will either grow upright on a table or can be planted in a gourd, when its foliage will hang down, turning into beautiful purple and red shades.

How many dollars can be saved in furnishing a bedroom by the use of inexpensive chintz and makeshift furniture. Our illustration shows a little table picked up for twenty-five cents at a junk-shop, and covered with a twelve-and-one-half-cent chintz. Such a table makes a useful extra one in a young girl's room. The hour-glass table is made of two peach-

underclothes; after receiving a dip in the dye-pot they emerge in soft yellows or delft blues and make a beautiful bit of color for the settle.

Our third illustration shows a clever outcome of the home dye-pot, and these are made from coarse unbleached muslin. The process is quite simple. The design must be marked out in pencil, and these lines must be followed by taking up a

It is after all, these little simple touches that add the true beauty to the home and give an opportunity for developing artistic perceptions in the various members of the family, thus enabling the home-makers to have something different from their neighbors. They will gain much pleasure in making things themselves. The boys can do the carpentering and the painting, while the girls can dye and plan the hangings and pillow-covers, thus centering the interest of the home in the family, and making each one do his or her part to make the home beautiful.

#### Apple Cake

TO MAKE a light and good apple cake, cream half a cupful of butter with two cupfuls of powdered sugar and beat light. Add to this half a cupful of milk. Sift with three small cupfuls of flour three tablespoonfuls of corn-starch and a rounded teaspoonful of baking-powder and add to the milk, butter and sugar alternately with the stiffened whites of six eggs. Bake in jelly-tins. For the apple filling, beat the yolk of an egg light, and with it beat a cupful of sugar and the grated peel and all the juice of one lemon. Into the mixture grate three pippins or other tart apples, stirring now and then to keep the apples from discoloring before they are coated. Cook in a double boiler until it is scalding hot, stirring constantly. Let this mixture cool before pouring it into the cake. Serve with cream.

#### Buckwheat Muffins

SIFT together, three times, one cupful each of wheat flour and buckwheat flour, one fourth of a cupful of sugar, four level teaspoonfuls of baking-powder and half a teaspoonful of salt. Beat one egg. Add nearly a cupful of sweet milk, and stir into the dry ingredients with three tablespoonfuls of melted butter. Bake twenty-five minutes in a hot, well-buttered, iron muffin-pan.

#### Cream Sponge Cake

PASS through a sieve together, three times, one and one half cupfuls of sifted flour, two level teaspoonfuls of baking-powder, one cupful of granulated sugar, and one fourth of a teaspoonful of salt. Break two large eggs into a half-pint cup, then fill the cup with thick sweet cream. Pour the eggs and cream into the flour mixture, add the grated rind of a lemon or orange, and beat the mixture vigorously until it is very light. Do not have the oven too hot at first, that the cake may rise evenly throughout before it crusts over. Bake about forty minutes.



A SIMPLE WAY TO GAIN ARTISTIC RESULTS



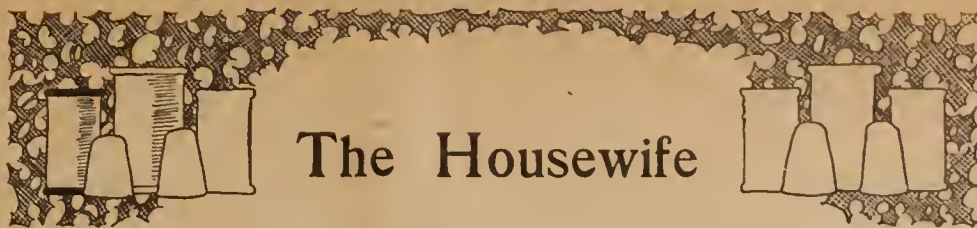
Heroines of the Revolution

[CONTINUED FROM LAST ISSUE]

N EAR the frontier of Georgia lived Nancy Hart, whose heroism is commemorated in the naming of the stream "War-Woman's Creek." Being accused of harboring a noted rebel, Nancy admitted her agency in securing his escape, and even taunted the loyalists with the trick she had played upon them. Her boldness did not please the Tories, but being hungry they contented themselves with commanding her to prepare food for them. She replied that she never fed traitors and king's men if she could help it, and added that the depredations of the enemy had put it out of her power to feed even her own family, as all her pigs and poultry had been killed "except that one old gobbler you see in the yard." "And that you shall cook for us," said one who appeared to be the leader, and raising his musket he shot down the turkey, which another man brought to Nancy, ordering her to cook it without delay. She protested, but finally consented, and enlisting the aid of her daughter, a child of ten years, she began her preparations. Hidden in a stump near the spring was a conch-shell used by the family to notify Hart or his neighbors, when working at a distance, that the Tories were about, and variations in the call indicated that he was needed at the cabin, or that he was to keep close, or "make tracks" for the swamp. While bustling around the hearth Nancy instructed the child to bring some water, and to blow the conch, giving her father warning of the presence of the unwelcome guests. The little girl obeyed. While the men made merry over the gobbler and a jug of liquor, their hostess waited on them, and occasionally passed between them and their muskets. More water was called for by the revelers, and again Sukey went to the spring, by her mother's orders, but this time the signal she blew was the summons to the cabin. In the meantime the mother, taking out the "chinking" between the logs of the cabin, passed out two of the five guns, and was putting out the third when she was detected. The men sprang to their feet, but quick as a thought Mrs. Hart brought the piece to her shoulder, and threatened to kill the first man who approached her, a threat she promptly carried out as one of the men moved toward her. "Daddy and them will soon be here," reported Sukey, as she picked up the remaining gun and carried it outside. The trapped Tories proposed a general rush, and again the woman fired, her aim bringing down another of the enemy. Sukey stood by with a musket ready for her mother, who, posting herself in the doorway, called upon the party "to surrender to a woman." They agreed to surrender, but unwilling to trust them, Nancy stood guard over them until her husband came, with three neighbors. Summary vengeance was wreaked upon the captives. "Poor Nancy," said one who had known her, relating this story of her courage, long years after the Revolution, "she was a honey of a patriot—but a devil of a wife."

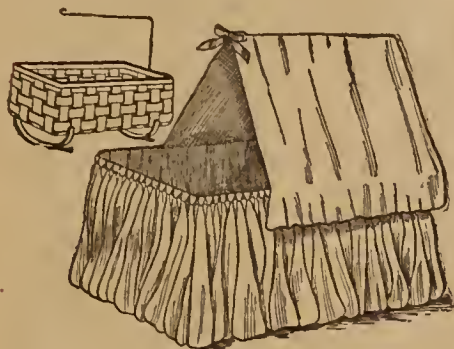
Little Sukey, giving signals and handling guns, showed herself familiar with the exigencies of frontier life, but even in play the spirit of war seemed to dominate the thoughts and acts of the children of the Revolution. The Marquis de Chastellux, describing the treatment accorded Burgoyne and his staff by Mrs. Schuyler, wife of the general, tells of her efforts to alleviate the distress of the prisoners. In the apartment assigned to Burgoyne several mattresses were spread for his officers, and here they were found by Master Schuyler, "a little fellow, about seven years old, very arch and forward, but very amiable. Opening the door of the saloon, he burst out a-laughing on seeing all the English collected, and shut it after him, exclaiming, 'You are all my prisoners.'" Mrs. Schuyler showed a fine spirit of forbearance toward the enemy, and her graceful courtesy was felt and acknowledged by the British officers. Her resolution and courage had been shown some time before, when the Continental Army was obliged to retreat from Fort Edward, before Burgoyne. She went herself, from Albany to Saratoga, in her chariot, to see to the removal of her furniture, and while there received instructions from her husband to set fire with her own hands to his extensive fields of wheat, and to request his tenants and others to follow her example with their fields rather than have the crops reaped by the foe.

Hannah Erwin Israel, wife of Israel Israel, was nineteen years of age when her husband was arrested as a spy, and accused of seditious language. He had been heard to say that he would sooner drive his cattle as a present to General Washington than receive thousands of dollars for them in British gold. He was carried on board the frigate, and treated with the utmost severity. The young wife developed heroic qualities in those trying days.



The Housewife

Her loyalty to her husband made her determine that not one of his cattle should be taken by the British, and when she saw the soldiers advance toward the meadow, she started off, determined to baffle them, at the peril of her life. Letting down the bars, she ran to drive the herd to the opening. The soldiers threatened to shoot. "Fire away" was her response, and the balls flew thickly about her. The frightened cattle ran in every direction. "This way," she called to the little boy who had accompanied her. "This way, Joe. Head them here. Stop them, Joe. Do not let one escape." And not one did escape. The bullets whistled around them, so scaring the child that he fell to the ground, where-



DOLL'S CRADLE MADE FROM GRAPE BASKET

upon Mrs. Israel seized him by the arm, lifted him over the fence, and drove the cattle into the barnyard. The baffled assailants, fearing the wrath of the neighbors, returned, disappointed, to the ships.

Miss Nancy Jackson, who lived in the Irish settlement near Fairforest Creek, has a record in history for the robust quality of her opposition. She kicked a Tory down the steps as he was descending with a load of plunder. In a great rage he threatened to send the Hessians there next day, and the athletic Nancy decided to be absent, taking refuge with acquaintances, some miles away. Samuel McJunkin, a staunch patriot, but too old for the battlefield, gave compulsory shelter to a foraging party, who stayed all night, and attempted the next morning to carry off all the bed-clothes and wearing apparel in the house. The last article seized was a bed-quilt, which one Bill Haynesworth placed upon his horse. Jane McJunkin, the patriot's daughter, seized it, and a struggle ensued, the combatants being encouraged by the cries of the amused soldiers—"Well done, woman!" "Well done, Bill!" The colonel swore that Jane should have the quilt if she could take it from the soldier—which she did. Bill's foot slipped, and he fell to the ground, panting, whereupon Jane placed one foot upon his breast, and wrenched the quilt from his grasp.

Another thrifty, careful home-maker, Mrs. Caldwell, was equally resolute in defending her treasures, and when a soldier drew from the drawer her best tablecloth, intending to take it with him, the intrepid owner seized it, and after a very



COIN PURSE

uneven struggle secured it, the officer in charge commanding the soldier to let go.

Not only were these ladies ready with their hands, but they had also a disconcerting fluency and sharpness of speech that stung the enemy, and at times angered them to the extent of punishing the offenders. Witness the penalty paid by the vivacious Mrs. Brewton. Being asked by a British officer for news from the country, she replied that "all nature smiled, for everything was *Greene*, down to Monk's Corner." The bon mot was noticed by an order for the lady to leave the city. The society of this "sprightly

and fascinating widow" appears to have been much sought after by the more cultivated among the British officers, who enjoyed her wit, though often obliged to wince under her sarcasm. On one occasion when passing the house of Governor Rutledge, in company with an English officer, the widow tore a bit of crape from the flounce of her dress, and tied it to the front railing, expressing her conviction that the house, as well as the governor's friends, ought to wear mourning. A few hours after this act of defiance the lady was arrested and sent to Philadelphia.

Mrs. Willie Jones was another matron gifted with a pretty wit, as was also her sister, Mrs. Ashe. Tarleton, who sneeringly remarked, in reference to Washington's size, that he should like to have an opportunity to see that man, was quickly reminded by Mrs. Ashe, "If you had looked behind you, Colonel Tarleton, at the battle of Cowpens, you would have had that pleasure." The taunt so moved the colonel that involuntarily his hand sought the hilt of his sword.

Margaret Gaston, whose husband had been shot in her presence, devoted herself with assiduous care to the training of her children. Though born in England, she had been educated in France. Her parents wishing her to have the advantage of Catholic training, placed her in a convent, where she passed many happy years. After leaving school she went to America to her brothers, and there she met and married Dr. Alexander Gaston. Though still young when left a widow, she never married, and the anniversary of her husband's tragic death was observed by her as a day of fasting and prayer. When her son was seven or eight years old, a little school-mate asked him why he "was always at the head of his class?" "There is a reason," replied the boy. "But if I tell you you must promise to keep it a secret, and do as I do. Whenever I take up my book



A NOVEL PILLOW

to study I first say a little prayer that my mother taught me, that I may be able to learn my lessons." He tried to teach the words to the dull pupil, but finding that he could not remember them, wrote out the prayer in the hope that his friend would be helped to get his lessons. Those were the days when young people sat up straight in the presence of their elders, and it is said of Mrs. Gaston that she never permitted her daughter or any of her juvenile friends to rest their shoulders against the back of a chair. During the last seven years of her life Mrs. Gaston seemed constantly engaged in preparing for eternity. A room in her house was fitted up as a chapel, and services were held whenever a priest visited that section of the country.

Washington's own mother afforded an example of greatness of character, and even to the latest hours of her life her distinguished son, chosen to rule the destinies of the United States, yielded to her will the most implicit obedience. Calmly she received the congratulations of the patriots, and when informed of the surrender of Cornwallis she lifted her hands toward heaven and exclaimed, "Thank God! war will now be ended, and peace, independence and happiness again bless our country." And when the Marquis de Lafayette bowed low before her, lavishing encomiums on his chief, she said, "I am not surprised at what George has done, for he was always a very good boy."

Coin Purse

IT sometimes happens that one has among their relics an old silver watch they would not part with because it was given by some dear friend, or perhaps belonged to someone of whom they were very fond, now deceased. If you are fortunate enough to have one, you are fortunate indeed. In New York City the ladies are trying at all jewelry and pawn stores to find the old silver cases.

You first remove the works from the

case, then take it to some jeweler, or anyone who could cut the silver, and have your monogram cut on the back part of the case. Get some pretty shade of stiff paper, either in blue or dark green, whichever you prefer, and place next to the monogram inside the case. This makes it show up to better advantage. Then attach two or three links from some old silver bracelet or chain to the ring in the watch. Use the upper part of the case as the under part on account of opening and closing easier. Hook this over your belt, with the monogram on the outside, and you have a handsome coin purse.

M. E. W.

Topsyturvy Pillow

THIS catchy pillow is made by using any sized feather or down pillow you like. Get two old-fashioned red or blue bandanna handkerchiefs, place the corners of the handkerchief between the corners of pillows, then tie the upper and lower handkerchiefs together by knots. After all four corners are tied, tack securely to keep in place while in use. If you are able to find the handkerchiefs with the Persian border and yellow center, they make a more striking pillow than the red or blue, although either are pretty.

M. E. W.

Get Acquainted with Mother

GIRLS, take your mother into your confidence. It has not been many years since she was a girl like you are now. She has not forgotten how she enjoyed then the same things that you enjoy now, and it will be a pleasure to both of you to talk over the things that interest you.

Nine times out of ten a mother's heart is as young as ever it was, even if duty has so engrossed her attention that she seems to you to care for only the practical things of life. Yet away down deep in her heart are desires for pleasures and amusements as strong as your own, but held in check by her love for your welfare, that often can be obtained only by self-sacrifice on her part, and has been practised so long that she herself has almost ceased to think she had ever done otherwise.

If you will only make the effort to find out you will be surprised to know how "chummy" your mother can, and will be, after you have become acquainted with her. There are too many girls unacquainted with their mothers. You will enjoy life's pleasures infinitely more if you talk them over, both before and after enjoyment, with your mother.

Owing to her years of experience she can often give you advice and instruction that will keep you from making blunders or mistakes you would otherwise make. Tell her of your friends, and have her meet them when convenient. She can give you points in regard to judging character that will be invaluable to you, and often by her help you may be able to retain a friendship that some thoughtless act of yours endangers.

Not only should you try to interest your mother in your affairs, but interest yourself in matters that are important to her. Share her burdens, and she will then have more leisure to share your interests. Her heart will also grow warmer and lighter to know that you sympathize with and appreciate her.

MRS. WHITELOCK.

Orange Marmalade

SLICE nine oranges and six lemons cross-wise with a sharp knife, as thin as possible; remove the seeds and put in a preserving-kettle with four quarts of cold water. Cover and let stand for thirty-six hours. Let boil for two hours, add eight pounds of sugar, and then let boil for two hours. Turn into jelly glasses.

Doll's Cradle

A CHARMING doll's cradle can be made from two ordinary grape baskets. Select one with a wooden handle and the other with a wire handle. Carefully remove the wooden handle, preserving the little brads if possible, and being very particular not to split the brim of the basket. Cut the handle across in the middle, and put the two pieces into a bucket of water to soak. When they become soft and pliable, bend them into bows, and fasten across the bottom of the basket one inch from either end, for rockers. Take the wire handle from the second basket, leaving the hooked ends, and bend the handle and fasten it to the back of the cradle. Make the trimmings of bright-colored cheese-cloth. Pad the basket with cotton-batting and cover with lining drawn smooth. Make a mattress and a pillow. Make a full ruffle of the cheese-cloth, just deep enough to touch the floor, and sew around the top of the basket. Fold a piece of cheese-cloth over the wire top for a canopy. Place a bow of pretty ribbon on the top.

M. P. C.



Hide-and-Seek Picnic

BY HILDA RICHMOND

ALL the grown people said "What a pity!" when they saw the rain coming down in a steady pour the morning that they had hoped would be bright and sunny, but the children just sat down and wept. They had been away from home when one picnic was held and sick when the Sunday-school had the big annual affair by the lake, so this little picnic had been arranged to console them, and now it was raining as if it meant to keep it up all day.

"Never mind! We'll go to-morrow," said one of the grown people. "We'll have some nice rainy-day games in the house and think about the good time we'll have to-morrow when the sun shines."

"It won't shine to-morrow! The woods will be too wet! It's too mean for anything!" Even grandma had to come out of her room to see what could be the matter. The children all cried and would not be consoled, so things were gloomy inside and out. There were three of the Field children and three visitors, so you may imagine how much noise they made in the big sitting-room.

When mother and Aunt Katy found they would rather cry and scold than play, they shut the door and left them until they should feel happier. Presently the noise stopped and a peep into the room showed six boys and girls busy building block houses on the floor. The rain was still beating against the windows, but the little folks had almost forgotten about it.

"Dinner! Dinner!" called Mrs. Field, and the children raced to the dining-room.

"Why!" cried six voices at once, for the table was bare.

"What is the matter?" asked Aunt Katy.

"Dinner isn't on the table," said Fred. "We're awful hungry."

"We are having a hide-and-peek picnic to-day," explained Auntie. "The first one who finds the dinner will get a prize."

Such a scampering you never saw! The more they hunted the hungrier they got, but no one would give up. Once little Paul wanted to ask, but the rest would not let him. In the cellar, up in the attic, in grandma's room and everywhere they hunted, but no sign of the picnic appeared. At last Belle had a bright thought so she sneaked out the back way with an umbrella and rubbers to the big new barn, and presently came flying back with bright eyes and rosy cheeks.

"I've won the prize! I've won the prize!" she screamed just as the other children were searching the cellar once more. "All of you come quick to the new barn!"

Like little ducks they scampered through the rain, and when they reached the new barn they found a long table just loaded with good things. No horses or cattle had ever been in the barn, but the mow was full of fragrant hay and great bundles of corn-fodder stood about on the wide floor. The prize was a little box of peppermints, so all the children had a share of the round candies.

"I'm glad it did rain," said Harold. "We will have two picnics instead of one, for the sun is shining now, and we can go to the woods to-morrow."

"Won't you hide the picnic again to-morrow?" begged all the children. "It would be such fun to hunt through the woods."

So every picnic since that gloomy day has been a hide-and-peek one for the children.

The Girl Who Knew Nothing

"Boys, your Aunt Nellie is coming to visit us next week, and she is going to bring Addie with her," said Mr. Hancock. "I hope you will take pains to show her all over the farm, for things will be new to her, coming from the city."

"I don't suppose she'll know a horse from a cow," laughed Fred. "I don't like to be bothered with a girl, but we'll have to stand it, I guess."

"It will be fun hearing the queer things she'll say," said Horace. "She'll want to poke into the bee-hives and wear a red dress in the cow pasture, likely as not."

"Remember, you are not to laugh at your cousin, boys," said Mrs. Hancock. "Things in the city would look just as strange to you as country sights will be to her. I think you will have a good time together."

When Addie came she proved to be a little girl of nine in a gingham dress, stout shoes and a simple straw hat who was wild to see everything on the place. She looked so sensible and so happy that her three cousins decided she would make a good playmate, if she was only a girl from the city who knew nothing, and they were on friendly terms at once.



The Young People

"Hops!" cried Addie, pointing to the rustling green bells on the tall poles. "Aren't you going to pick them?"

"Mamma uses a few for yeast but the rest just hang there," said Ray. "How did you know what they are?"

"I saw a picture of them in a book,"

"She does know something," said Horace when the money came for the hops and a letter asking for two more pillows. "I didn't suppose hops were good for anything."

"Yes, and she told me of a place to sell hickory-nuts for a lot more than Mr.



NINE AND NINETY

said Addie, "and Mrs. Anderson said she would give a dollar for enough to fill a pillow. Her mother thinks they are so good to sleep on and Mrs. Anderson wants them so bad. I wonder if Aunt Anna would let us pick them?"

Jones pays," said Fred. "I'm going to write to the man and ask him if he wants what we've gathered."

"Aunt Anna is going to give me the old trunk in the attic," said Addie the week before she went home to start to school,

"and I am going to fill it with pretty things. Some of the children at school never get to see the country, and I want to take a little of it to them."

The boys laughed when they saw the little girl put in yellow, red and white corn, ears of wheat, grasses and wild vines. They could not understand why anyone would want to see anything as common as corn. "Your teacher will tell you she has no room for trash," said Horace loftily, as he looked over the queer collection. "What do you want with that old robin's nest?"

"To show how the birds build their nests," said Addie. "We read about such things in books, but a real nest will help show the boys and girls how clever the dear robins are."

"What do you think?" said Fred very much excited one day when a letter came from Addie. "Some of the other teachers have borrowed the things Addie took home, and they would like to buy some things of their own. What do you think of anyone wanting to buy corn and old bird's nests!"

"If they can't see the country as Addie did, maybe they like to look at the things from the country," said Ray. "I'm going to get to work right away."

"What do you think about the girl who knew nothing about country life?" asked Mrs. Hancock with a twinkle in her eye. "I think she has opened the eyes of three country boys very wide, don't you?"

"I guess she has," said Horace rather sheepishly. "I wish she would come back next summer and stay with us all vacation."

"I'm going to read up about the city, so when we go this winter I'll know something about it, the same as she did about the country," said Fred. "I'm not going to talk about people after this till I know what I say is true. I thought Addie wouldn't know a thing about the country, and she taught us a whole lot in three weeks. I guess it isn't safe to decide about folks beforehand."

"That is true," said Mrs. Hancock, "and I am glad my boys have found it out."

Alphabet of Proverbs

A grain of prudence is worth a pound of craft.

Boasters are cousins to liars.

Confession of a fault makes half amends.

Denying a fault doubles it.

Envy shooteth at others and woundeth herself.

Foolish fear doubles danger.

God reaches us good things by our own hands.

He has hard work who has nothing to do.

It costs more to revenge wrongs than to bear them.

Knavery is the worst trade.

Learning makes a man fit company for himself.

Modesty is a guard to virtue.

Not to hear conscience is the way to silence it.

One hour to-day is worth two to-morrow.

Proud looks make foul work in fair faces.

Quiet conscience gives quiet sleep.

Richest is he that wants least.

Small faults indulged are little thieves that let in greater.

The boughs that bear most hang lowest.

Upright walking is sure walking.

Virtue and happiness are mother and daughter.

Wise men make more opportunities than they find.

You never lose by doing a good turn.

Zeal without knowledge is fire without light.—Melbourne Leader.

A Boy with a Future

Henry Morgan the office boy to a large manufacturing company, was a smart youngster, and one day when he was sent to one of the operating departments with a message he noticed at once that something was wrong with the machinery. He gave the alarm, and thus prevented much damage.

The matter was reported to the head of the firm, who summoned Henry.

"You have done me a very great service, my boy," said the genial chief. "Your wages will be increased by one dollar weekly."

"Thank you, sir," said Henry. "I will do my best to be worth it."

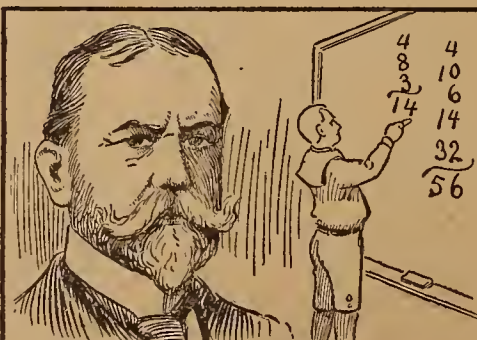
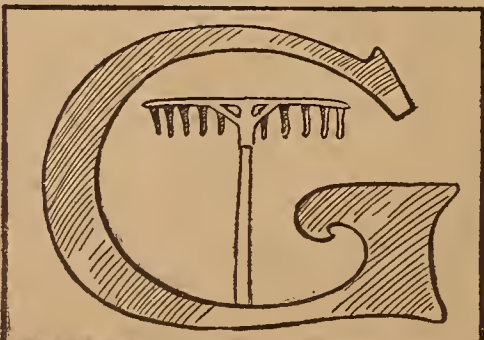
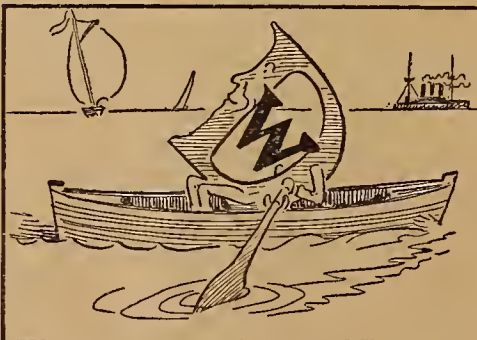
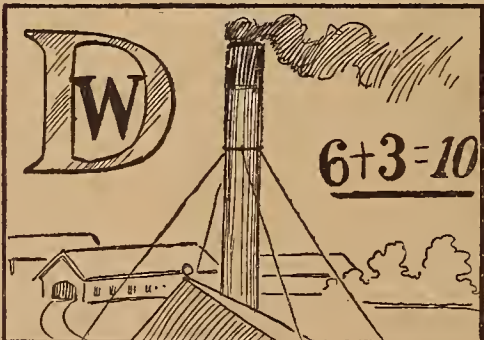
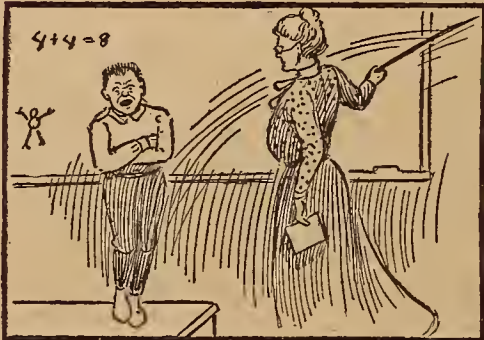
The reply struck the chief almost as much as the boy's previous services had done.

"That's the right spirit," he said. "In all the years I have been in business no one has ever thanked me in that way. I will make the increase two dollars. Now, what do you say to that?"

"Well, sir," answered Henry, after a moment's hesitation, "would you mind if I said it again?"—American Boy.

Harvest-Time Puzzle

Each of the Six Pictures Below Are Suggestive of the Harvest Season. Are They Plain to You?



Correct Answers Will be Published in the Next Issue





Sunday Reading

When a Man is About to Die

IT IS NOW the fashion not to tell a man when he is about to die. That is a question that belongs to the physician, and it may be that at times he is right about it. But I am sure there are times when that method is wrong.

A few months ago in an Eastern city a good man was dying. The physicians spoke of a hypodermic to relieve the pain of the last hours and let the patient depart peacefully and without knowing his condition. The sick man's brother favored this plan; his business partner and fellow-member of the church said: "No; he is a brave man; tell him the truth;" the wife, in tears, could not decide. They sent for the minister and submitted the case to him. "Tell him the truth."

They told him, and he said: "Gentlemen, I am not afraid to die, and have not been afraid of death for many years; but I do not think it would have been quite fair not to let me know. I thank you for telling me. About how long will it be?" They told him an hour, or possibly two hours. The first half hour he spent alone with his wife. After that he called in the friends who were there, and a few others whom he asked to have called by telephone. They sang a hymn; the minister offered prayer; he said his dying words, which are a rich heritage to his widow. A layman who was there told me that the scene at that deathbed was to him an evidence, such as he had never known before, of the power of the gospel to make men brave and true.

I am more and more convinced that, however important it may be at times to conceal from a patient some details of his condition, in the long run there is nothing so good for any man, sick or well, as the truth.—The Advance.

Contamination

A PARTY of young people were about to explore a coal mine. One of the young ladies appeared dressed in white. A friend remonstrated with her. Not liking the interference, she turned to the old miner who was to conduct them, and said, "Can't I wear a white dress down into the mine?"

"Yes, mum," was his reply, "there is nothing to hinder you from wearing a white frock down there, but there'll be considerable to keep you from wearing one back."

There is nothing to hinder a Christian from conforming to the world's standard of living, but there is a good deal to keep him from being unspotted if he does. "Christians were put into the atmosphere of this world to purify it, and not to be poisoned by it."—The Christian Century.

Give the Children a Chance

MANY parents are considering seriously the question of the future of their children and planning to give them the best opportunities possible. They owe this much to the children whom God has given them. That debt they have been paying in toil and sacrifice since the day they first looked into the face of the babe who already claimed their purest affection. Perhaps some of these parents feel that the debt has been paid, and the child for whom they have toiled and sacrificed must now fight the battle alone. If they have done their best for the boy and girl who will soon go out into the world it is all that can be demanded of the parent.

Will it be possible to send the children to college? That question has been asked in many homes during this vacation season, and in many instances it has been difficult to decide. Perhaps some have decided that the children do not need a college training. Father and mother perhaps did not have the advantage of the common schools, and with this training you think the children should be able to make their own way. Conditions have changed since your day, however. You did not have these opportunities in youth; you have nevertheless fought your way and in a measure you have succeeded. We honor the men and women of the generation past who, without the advantages we to-day enjoy, have not given over the battle, but have met the duties of life faithfully and courageously. Your children, however, face changed conditions. They live in an age when the opportunity for collegiate training is open to the boy or girl who has the spirit of the father and mother who made their own way. If by any sacrifice you can give them these advantages we beseech you to make the sacrifice. They will enter the battle with the odds against them if they are denied

this privilege, and those odds will grow stronger as the years pass. Plan now to send the children to college; it will be an investment worth far more to them than the amount you might save for them by denying them that privilege.

In considering this important question of a college education, be careful as regards the school you select. Above all else consider the moral and spiritual welfare of your children.—Alabama Christian Advocate.

How a Boy Should Treat His Mother

IN FAR TOO many instances "father" and "mother" are giving way to "the old man" and "the old woman," for whom the "kids" seem to have but little of the warm filial love and beautiful filial respect that used to characterize the child's feeling toward the parents.

A boy should treat his mother with a heartfelt, uniform kindness. He should strive to love her with all his heart and soul and strength, and to love her that way right along.

Once a mother always a mother, is the word that every son should thoroughly believe in.

The mother may sin, for she is human, but she can commit no sin so rank and monstrous as would be committed by the son who, in her sin and sorrow, would desert her.

In saying that a boy should love his mother, I say all that it is possible to say; for to love one's mother is to be kind to her, to be respectful to her, to study her comfort and peace, and in every way to be true and faithful to her.

When the great Mirabeau was dying, he called for flowers and music, desiring to die in the midst of sweet odors and rich melodies.

I am sure that the sweetest fragrance, the richest music that anyone can have about him in the solemn death hour is the memory of filial gratitude, the recollection of the fact that one was always true to father and mother.

I regret to say, however, and consider it an alarming sign, that there were never so many ungrateful, disrespectful children in the world as there are to-day, and that the number is steadily on the increase.—Rev. Thomas B. Gregory.

A Simple Life

I thank thee, Lord, that malice hath no part

Within my heart;  
I envy not my brother his renown,  
Nor crave his crown;

I only wish that all may dwell with me  
In amity.

I thank thee, Lord, I have not soiled myself

With greed of pelf;  
Of sordid deeds, unscrupulous and mean,  
My hands are clean;  
No fellow-creature's thought may ever blame  
For his shame.

I thank thee, Lord, thou hast not heard me ask

To shirk my task;  
I have not cursed the orbit of my fate  
Nor scorned my state;  
It is enough that I have had through life  
Strength for the strife.

I thank thee, Lord, I do believe thy Word  
As I have heard;

Through all time's tumult thou with me  
wilt bide  
Ever beside;

And when at last for me shall fall the night,  
Thy love shall light.

—Susie M. Best in Forward.

The Homing Instinct

"WHY are you content?" an officer asked an Omaha chief. "Pain and old age are not good things." The aged chief was silent awhile, and then said:

"The bird that builds its nest on the tree near my wigwam in summer leaves it when winter is coming, and travels thousands of miles to the southward; but in the spring it will come back across mountains and rivers to that very same nest. How do such creatures know the way? They have no map, no guide. The Great Spirit puts something in their hearts to draw them back to their homes. And he has not forgotten to put something in each man's heart that draws him, draws him all his life long, up to his home. I am coming near to mine. Shall I not be glad?"—Youth's Companion.

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SPRINGFIELD, OHIO

**Advanced Designs for Fall**

By Grace Margaret Gould



**No. 797—Surplice Waist with Three-Quarter Sleeve**  
Pattern cut for 32, 34, 36 and 38 inch bust measures. Quantity of material required for medium size, or 36 inch bust, three and three fourths yards of twenty-two-inch material, or three and one fourth yards of thirty-inch material, with three fourths of a yard of all-over lace for trimming

**No. 798—Double Skirt**  
Pattern cut for 22, 24, 26 and 28 inch waist measures. Length of skirt in front, 42 inches. Quantity of material required for medium size, or 26 inch waist, ten yards of twenty-two-inch material, or eight yards of thirty-inch material, with two and one half yards of lining thirty-six inches wide for the foundation

**T**HE fashionable woman this autumn will need more clothes than usual if she aims to keep up with the pace that the arbiters of fashion have set for her. More than ever before it is the gown specially suited to the occasion that is in demand. The new frocks seem purposely not adaptable for different sorts of wear. It is a far cry from the new autumn tailor-made suitable for morning wear to the costume designed specially for afternoon occasions.

The kilted skirt and the mannish semi-fitting coat will form the ultra-smart tailored gown. Frequently the skirt will be of striped material, and the coat in a solid color, matching the shade of the most predominating stripe.

Tweed, which is to be much worn this fall, is also an excellent material for this style suit. The newest tweeds show stripes, herringbone effects and the "gun-club" checks. The browns, grays and deep reds are the favorite colors.

The costume idea will be much emphasized this autumn, and very many of the new gowns will be made with double

skirts, the flounces cut circular, and the upper one carefully fitted to the figure with darts at the waist line. Draped and surplice waists will be worn with these skirts.

In the matter of trimming, the tailor-made suit will have none to speak of, but the costume will display many new and very lovely trimming fancies. Applications of taffeta embroidered in self colors will be used to trim materials like broadcloth, rep and voile. Ribbon velvets in different widths will be more in demand than ever.

Sutache braid will be high in favor, especially combined with hand embroidery. The braid may be sewed flat or on the edge, arranged in more or less open designs, and then filled in with embroidery



**No. 799—Redingote with Double Cape**

Pattern cut for 34, 36, 38 and 40 inch bust measures. Quantity of material required for medium size, or 36 inch bust, fourteen yards of twenty-two-inch material, or twelve yards of thirty-inch material

The Princess gown has had so great a vogue that it is quite in the line of a natural sequence for the one-piece Redingote, with its long lines, to come into favor at just this time. This long graceful coat will be very smart style all through the autumn and winter. Other Redingote models will be trimmed with braid or velvet bands to simulate an Empire effect.

Chiffon broadcloth is an ideal fabric to use for the Redingote here illustrated, though prunella, which is less expensive, would do admirably.

stitchings artistically worked in heavy silks.

Lace as a trimming is going back to its right place. Instead of decorating street costumes, as it so frequently did in the spring, it will be used almost exclusively as a garniture for house and evening gowns.



**No. 800—Tailor-Made Single-Breasted Coat**  
Pattern cut for 34, 36, 38, 40 and 42 inch bust measures. Quantity of material required for medium size, or 38 inch bust, seven yards of twenty-two-inch material, or five and one half yards of thirty-inch material, with one half yard of velvet for collar and cuffs

**No. 801—Kilted Skirt**  
Pattern cut for 24, 26, 28 and 30 inch waist measures. Length of skirt in front, 41 inches. Quantity of material required for medium size, or 26 inch waist, eleven and one half yards of twenty-two-inch material, or nine and one half yards of thirty-inch material

Very few dressy tailor-made gowns will be worn this fall. Severe styles for morning and shopping wear will have the preference. Fancy suitings in mannish mixtures will be much liked for these skirt-and-coat costumes.

In the fashioning of gowns this autumn, many of the newest and most beautiful effects will be obtained by successfully combining textures rather than colors. A brown broadcloth costume, for example, will be combined with brown velvet and brown silk, rather than having the velvet and silk in a contrasting color. The new effect will be reflected in the lights and shadows of the single tone as it is expressed by the different textures.





**A Lesson in Reading**

THE average school-teacher usually experiences a great deal of difficulty when she attempts to enforce the clear pronunciation of the terminal "g" of each present participle. "Robert," said the teacher of one of the lower classes during the progress of a reading exercise, "please read the first sentence."

A diminutive lad rose to his feet, and amid a series of labored gasps breathed forth the following:

"See the horse runnin'."

"Don't forget the 'g,' Robert," admonished the teacher.

"Gee! See the horse runnin'!"

**His Vote Justified**

John Carr, a son of Erin, was a conscientious and capable alderman. He had long been debating with himself how he should vote upon the proposition to build a city hall. He had scratched his head more than once over that very perplexing question, and had been advised pro and con by his friends and constituents. Finally the time came, and he must vote. Rising in his place, when the city clerk called his name upon the question, he thus explained himself: "Yer honor, Oi shall vote 'Oi' on this proposition, because yer honor, me conscience and me judgment commend; and whin Oi vote as me conscience and me judgment commend, Oi be r-roight, begorra, whither Oi be roight or-r r-ong."

**Roosevelt Spent Millions—and Walked Home**

President Roosevelt has a keen sense of humor. A few years ago he and Lieutenant Sharpe, of the navy department, had been negotiating for, and purchasing cruisers. They had spent about seven million dollars. It began to rain, and neither had an umbrella.

"Sharpe," said Roosevelt, "I have only four cents in my pocket. Lend me one cent, or five cents, will you, so that I can ride home?"

"I haven't a single cent," he answered.

"Never mind, Sharpe," said Roosevelt. "It doesn't often happen that two public servants spend seven million dollars and do not have even a car-fare in their pockets to bless themselves with."

**Finnigan to Flannigan**

(Published by Request)

Superintindint wuz Flannigan;  
Boss av th' siction wuz Finnigin.  
Whiniver th' cars got offen th' thrack,  
An' muddled up things t' th' divil an' back,

Finnigin writ it t' Flannigan  
Aft' th' wrick wuz all on ag'in—  
Thot is, this Finnigin  
Repoorted t' Flannigan.

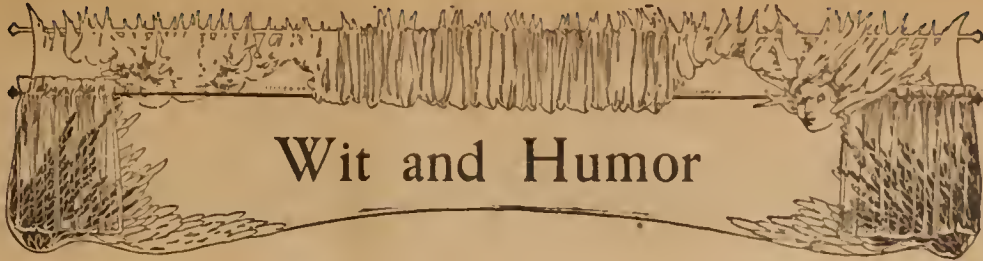
Whin Finnigin furst writ t' Flannigan,  
He writed tin pages—did Finnigin—  
An' he tould jist how th' smash occurred.  
Full minny a tajas, blunderin' wur-rd  
Did Finnigin write t' Flannigan  
Aft' th' cars had gone on ag'in.  
Thot wuz how Finnigin  
Repoorted t' Flannigan.

Now, Flannigan knowed more than Finnigin—  
He'd more idjucation, had Flannigan;  
An' it wore 'im clane an' complatly out  
T' tell what Finnigin writ about  
In his writin' t' Muster Flannigan.  
So he writed back t' Finnigin:  
"Don't do sich a sin ag'in;  
Make 'em brief, Finnigin!"

Whin Finnigin got this from Flannigan,  
He blushed rosy rid, did Finnigin;  
An' he said: "I'll gamble a whole month's pa-ay  
Thot it will be minny an' minny a da-ay  
Befoor sup'rindint—thot's Flannigan—  
Gits a whack at this very same sin ag'in.  
From Finnigin to Flannigan  
Repoorts won't be long ag'in."

Wan da-ay, on th' siction av Finnigin,  
On th' road sup'rindinted by Flannigan,  
A rail give way on a bit av a curve  
An' some cars wint off as they made th' swerve.  
"There's nobody hurted," sez Finnigin,  
"But repoorts musht be made t' Flannigan."  
An' he winked at McGorrigan,  
As married a Finnigin.

He wuz shantyin' thin, wuz Finnigin,  
As minny a railroader's bin ag'in,  
An' th' shmoky ould lamp wuz burnin' bright  
In Finnigin's shanty all thot night—  
Bilin' down his report, wuz Finnigin!  
An' he writed this here: "Muster Flannigan—  
Off ag'in, on ag'in,  
Gone ag'in.—FINNIGIN."  
—Strickland W. Gillilan.



**Wit and Humor**

**Which?**

"Ed Wolcott & Bro.," was the firm name when the late Senator Wolcott first went to Colorado and with his brother opened a law office in Idaho Springs. Later the partnership was dissolved. The future senator packed his few assets, including the sign that hung outside of his office, upon a burro and started for Georgetown, a mining town farther up in the hills. Upon his arrival he was greeted by a crowd of miners who critically surveyed him and his outfit. One of them, looking first at the sign that hung over the pack, then at Wolcott, and finally at the donkey, ventured:

"Say, stranger, which of you is Ed?"

**Standard Oil**

Employees of a grocery-store in Lakewood, New Jersey, are telling a story on Mr. Rockefeller. In the list of supplies for the Rockefeller household on a certain day was included a gallon of kerosene. The groceryman charged fourteen cents for it. The bill came under Mr. Rockefeller's eye, and he took the groceryman to task over the telephone. The conversation ran something like this:

"This is Mr. Rockefeller. You have charged me too much for oil. Fourteen cents is high, very high."

"Not at all, Mr. Rockefeller. I have to pay thirteen cents a gallon for all the oil I get."

"Ah, then, you couldn't charge much less, could you?"

"Couldn't do it and keep the store open," replied the groceryman.

**How Mark Twain Took the Girl Home**

At a meeting of the Smith College Club, in New York, Mark Twain was the chief speaker, and he told the audience of "a memory of my youth, that has remained with me all this time. When I was living in St. Louis with my mother, ninety-five years ago, when I was comparatively young, a lovely you, creature of sixteen

came to pay us a visit. When she entered a room, a general sweetness was diffused. I was paralyzed. I wasn't really myself. I was diffident then. My mother suggested that I, being seventeen, show the sweet girl some attention, but I hadn't the courage. 'Take her to the theater,' said my mother. So I took her thirteen blocks down town on foot. I never had presence of mind in my life until next day. Then I realized that I should have gone around twenty-six blocks.

"We were wedged in the middle of a row of seats as long as this. During the first act I was comfortable with the joy of being there with her. But the second act was not so comfortable. I had my Sunday boots on. They were No. 6, and my size was No. 9. Thus the boots began to get very tight. At last I had to find relief, and pushed one off a little. The heavenly change was so blissful that the other foot got more urgent. As one cannot linger on the verge of absolute perfection, I pushed both off until they were dangling. Then there was nothing in the way of happiness, until the curtain went down for the last time, and the people rose and wanted to go right off. I was trying to get my boots on. I couldn't have got a hand in. I couldn't afford to leave the boots, and so I took them along—the boots on one arm and the girl on the other."

**Egypt's Khedive Enjoys a Joke**

The Khedive of Egypt has a good sense of humor. He is not too dignified to laugh cordially at whatever amuses him, whether in the center of his audience-room, or at one of his state dinners. He especially admires the audacious wit of American women.

He tells with relish this incident of an American girl and himself, and evidently considers it a capital joke.

The young lady had been presented at his palace, and he especially admired her alert, eager face and graceful manner. The khedive asked her if she could speak the Arabic language. He was talking in English, French and German to his guests,

and wondered why the clever American did not learn the language spoken in Cairo. "You, for instance, haven't picked up any of our language, have you?" he said to the girl.

"I can say one or two words," she answered.

"Let us hear them," said the khedive.

She put her hand toward his pocket, and, with a perfect imitation of the whine of the beggars at Cairo, said:

"Bakshish, excellency!"

With instant appreciation of her audacity, he gave her a gold coin from his pocket, which she treasures as a souvenir of Egypt.

**How He Labeled It**

Pat Maloney was nailing a box which he intended sending by rail. It was important that the box should not be inverted during the passage, and a friend suggested to Pat to write conspicuously on the case, "This side up, with care." A few days afterward, seeing Pat, he asked: "Heard any more about your goods? Did they get there safely?" "Every one of them broke," said Pat. "The whole lot." "Did you label it, 'This side up,' as I told you?" "Yes; I did. And, for fear they shouldn't see it on the cover, I put it on the bottom, too."

**Could Tell it Another Way**

Many years ago an old and well-to-do farmer in western New York had something of a reputation as a litigant. He had a peculiar twist about his mouth when he talked, due to some muscular affection, which gave a striking effect to his utterances.

His old neighbors tell of a trip that he made to see his lawyers on a certain occasion when he had made up his mind to have a lawsuit. He sat down with his lawyer and laid out his case before him at length. The lawyer said: "Well, on that statement you haven't any case." The old man hitched his trousers nervously, twitched his face, and hastily replied: "Well, I can tell it another way."—From Case and Comment.

**The Nervous One**

The story is told of a traveler in Pennsylvania who had arrived late one night at a small village hotel and asked for a room. He was told that the only vacant one was next to that of a very nervous man whom he must be careful not to disturb. After going to his room the newcomer thoughtlessly let fall one of his shoes; then, recalling the warning he had received, placed the other very carefully on the floor. He had put out the light and retired when there was a knock at his door. Opening it, he faced the nervous occupant of the adjoining room, who demanded excitedly:

"Why in thunder don't you take off that other shoe?"

**An Unfair Way**

John Mitchell, President of the United Mine Workers, has been talking about the various methods in use at the mines for weighing coal. Of one method, a method of the past he said:

"This method was long ago abandoned on account of its unfairness. It was most unfair. The fist-and-pound method, in fact, was scarcely worse.

"The fist-and-pound method originated, they say, in Scranton. A simple-minded old lady ran a grocery-store there. A man came in one day and asked for a pound of bacon. The old lady cut off a generous chunk of bacon, and then, going to weigh it, found that she had mislaid her pound weight.

"'Dear me,' she said, 'I can't find my pound weight anywhere.'

"The man, seeing that there was about two pounds in the chunk cut off, said hastily:

"Never mind. My first weighs just a pound."

"And he put the bacon on one side of the scales and his fist on the other. The two, of course, just balanced.

"'It looks kind o' large for a pound, don't it?' asked the old lady, as she wrapped the bacon up.

"'It does look large,' said the man, as he tucked the meat under his arm. 'Still—'

"But just then the old lady found her pound weight.

"'Ah,' she said in a relieved voice, 'now we can prove this business. Put it on here again.'

"But the man wisely refrained from putting the bacon on the scales to be tested. He put on his fist again instead. And his fist, you may be sure, just balanced the pound weight.

"The old lady was much pleased. "'Well done,' she said, 'and here's a couple o' red herrin' for yer skill and honesty.'"—New York Sun.



Small Boy—"I want to see Dr. Jones, please."  
Maid—"He's not in now."  
Small Boy—"Well, directly he gets back, will you tell him to come to our house—sharp—and take away that baby he left last week? It's in the way!"

The Sketch



## Moving Buildings

HERE is the queer outfit of the oddest house-moving character in all Hoosierdom.

It is owned by Elisha Warden, of Monticello, Indiana, who has been moving buildings for forty years, and at the age of seventy is still in the business.

In the accompanying picture Mr. Warden has hitched a drain-ditch digger to a frame house and is moving it through the town to the banks of the Tippecanoe River. When the engineer blows his whistle and rings his bell, the big digger drags the building as easy as a child wheels a baby carriage.

Uncle 'Lisha has had some strange experiences in his day. He has moved buildings in a score of Indiana towns, some of them two or three times, has moved families several miles without disturbing them. People have been married, others were born, while a house was being moved from one foundation to another. Uncle 'Lisha says that he has accomplished such things "without slipping a cog," and he says he will be moving houses when he is a century old, and everybody in Monticello reckons that he'll do it.

He says that his oddest experience was in traveling to Texas, one thousand five hundred and eight miles, shipping a ton of tools, and moving a church a mile. It happened at Crockett. He did the job in eight days, got \$40 for the job and was satisfied, because he wanted to see the Lone Star State. A preacher hired him to do the work, jewed him ten dollars on the price, but was so delighted with the job, that he invited him to stay a month and paid his expenses. The preacher had paid \$75 for the building, but after Uncle 'Lisha had set it down on a new set of pillars it sold for \$1,000 cash.

J. L. GRAFF.

## Human Flag

THE accompanying photograph represents what is termed a human flag. As it clearly shows the staff is composed of boys, while the flag itself is composed of girls attired in suitable costumes to represent the various designs which the flag is intended to typify. As this flag drill was given in the United States, naturally the design is that of the American flag. The stars representing each state are shown by white capes covering the shoulders of the girls and white caps. The stripes are formed by girls dressed entirely in gray, a line of gray alternating with each row of stars.

The most interesting fact, however, was that this human flag was by no means motionless, but marched up and down the field where it was formed. It was composed of the school children of the city of Portland, Oregon, of whom several hundred were required in all to form it.

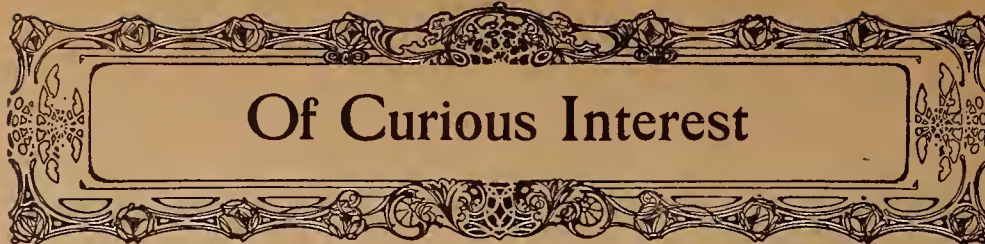
D. A. WILLEY.

## Fortune in Bible

A CAPTAIN in a regiment stationed at Mont de Marsan, France, recently purchased an old Bible in a second-hand book-shop for four shillings and found between two of the leaves bonds to the value of \$17,500, payable to bearer, and signed by a landowner who died some years ago. He visited the solicitors who had charge of the estate, and on looking into the case they found that the bonds, which it was known the gentleman held, were missing.

## Queer Courtship

THE courtship custom in Turkey is indeed a queer one. The selection of a wife for a young man is the business of his mother and female relations who visit several marriageable girls and select one, with whom the bridegroom then exchanges a ring—by messenger. On the day of the betrothal contract an imam gets the assent of the bride-elect



## Of Curious Interest

through the door of the harem and the two families dine together, neither of the two persons most concerned being present. On the wedding day, the bride's trousseau is taken to her husband's house, while she is taken the round of her relatives, and there is much dancing at every house, after which her male relatives exorcise all malign spirits with swords and spears, in dumb show of fighting. Finally, evening draws on, the bride reaches her husband's home,

miles in length, and varies in height from 40 feet to 50 feet. It was built over 2,000 years ago.

The skin of an elephant usually requires about five years to tan. The skin of the famous elephant "Jumbo" was eventually used to make traveling-trunks, now in the possession of an English gentleman.

From 1802 until 1813 Napoleon I. was responsible for the deaths of 5,800,000 men, or at the rate of half a million a year. Many of these were his own soldiers.



HOUSE BEING MOVED BY A DRAIN-DITCH DIGGER BY THE ODDEST HOUSE-MOVING CHARACTER IN THE WORLD

and everybody clears out, leaving her and her husband to see each other for the first time, and to scrape acquaintance as best they can. Under the old Moslem law even speaking acquaintance would have been impossible, as the bride was doomed to absolute silence for a whole month. Now her husband gives her a present at meeting, and she may speak. There are few barbarous tribes in the most benighted of continents where courtship and marriage are more grotesquely conducted. It is lucky for the Turkish suitor that he need not even pretend to be a lover. No ardor could survive the chilling formalities that have to be gone through.

## Strange But True

ANTWERP claims to have printed the first of the world's newspapers in 1605, and celebrated the tercentenary in 1905. The paper was published by Abraham Verhoeven, and antedated the first English paper by seventeen years.

New Zealand has set apart two islands for its remarkable wild birds and animals. Thereon all hunting and trapping are forbidden.

The saying that it takes "nine tailors to make a man" has nothing to do with knights of the needle. It originated in the practise of tolling a bell thrice three times for the death of a man. Hence nine tailors made it a man. Only six were tolled for a woman.

The Great Wall of China is the largest artificial structure in the world. It is 1,500

The railways of the world arranged in a straight line would reach to the moon and back again to the earth.

It is estimated that it takes two years for the waters of the Gulf of Mexico to travel to the coast of Norway.

## Danish Table Manners

APRETTY table observance in Danish families is for children, even little ones who can scarcely toddle, to go gravely after dinner to salute their parents and say "Tak for mad" ("Thanks for the meal"). Even visitors shake hands with their host and hostess and go through the same formality. In German families that hold to tradition the same custom prevails. When the evening meal is ended the party stands up around the table and each member shakes hands with the neighbor, saying, "Gasegnete mahlzeit"—blessing the food.

## "Going Some"

THIRTEEN hours is now the record for waltzing in France, and belongs to an Italian. Ten competitors, including several energetic children, started dancing in Paris recently at 1 a. m. At 5 the last child had dropped down from exhaustion and was put, none too soon, to bed. At noon, of two competitors remaining, one gave up—and then there was one. He waltzed on for two hours longer, but his legs sank beneath him—and there were none. He had succeeded in dancing six women nearly to death during his performance.

## Diving for a Wife

DIVING for sponges forms a considerable part of the occupation of the inhabitants of many of the Greek islands. The natives make it a trade to gather these, and their income from this source is far from contemptible.

In one of the islands a girl is not permitted to marry until she has brought up a certain number of sponges and given proof of her skill by taking them from a certain depth; but in some of the islands this custom is reversed. The father of a marriageable daughter bestows her on the best diver among her suitors. He who can stay longest in the water and bring up the biggest cargo of sponges marries the maid.

## Busy Souvenir Hunters

THE silverware of the city hotel has ever been the object of the souvenir hunter. One hotel proprietor declares that unless things change he will have to chain his silver cream pitchers, sugar bowls, etc., to the table, as the Bible used to be chained to the pulpit in the old days. "Some people who were dining in a hotel restaurant were observed to take a silver pitcher," says "Good Housekeeping." "After the meal, when they came to pay the bill, it was mildly suggested that the pitcher would better be included. Of course, they were highly indignant. 'Very well,' said the cashier, 'I don't want to cause you unpleasant publicity,' and turned his back and walked off. When he returned the pitcher had reappeared on the table."

In another case a passer-by outside saw a woman of apparent refinement and excellent social position conceal some table silver in her clothing. That woman will be much astonished the next time she patronizes this hotel at the size of her bill.

Still another hotel patron on her way out to a car dropped a silver sugar bowl. One of the hotel employees happened to be near. He picked it up, and bowing politely, said: "Thanks. So good of you to leave it."

Knives, forks and spoons are constantly disappearing. Hotels pride themselves now on the fine quality of their china and silver, so the aggregate loss yearly in dollars and cents is enormous.

Nor is it silver alone that is taken. Hotel table-linen and towels are favorite trophies. Only those of highest quality are used, but none ever stays at the hotel long enough to get worn.

Soap dishes vanish so rapidly that they are screwed to the wall.

Sofa-cushions cannot be kept on the divans in the halls. After a recent large banquet it was found that scarcely half the spoons accompanying the after-dinner coffee returned to the kitchen, and a considerable number of the cups were missing. These tiny cups, by the way, are favorite trophies. At one hotel fifteen dozen of a single design disappeared inside of three months, and the waiters had exercised considerable discretion in their use.

At another hotel, where a large convention was to be held, the proprietor resolved to head off the inevitable loss of his valuable table accessories, so he had made for this occasion a large number of attractive, but comparatively inexpensive china dishes with the name of the convention and the crest of the hotel.

As he expected, when the delegates were gone, practically all of that particular set of china was gone, too, but the hotel-keeper felt that the expense was more than balanced by the saving in other articles.

The hotel-keepers' association has been forced to take the matter up, and a systematic crusade against this nuisance will doubtless ensue; where one hotel could not run the risk of alienating a patron, together they can work effectively.



SCHOOL CHILDREN IN HUMAN FLAG FORMATION



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Some Very Appropriate Designs for School Children

Order all Patterns from Pattern Department, The Crowell Publishing Co., 11 East 24th St., New York City

FULL DESCRIPTIONS AND DIRECTIONS—as the number of yards of material required, the number and names of the different pieces in the pattern, how to cut and fit and put the garment together—are sent with each pattern, with a picture of the garment to go by.



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Sizes 6, 8 and 10 years. 10 cents.



No. 795—Father Knickerbocker Suit  
Sizes 4, 6 and 8 years. 10 cents.



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Sizes 34, 36, 38 and 40 inch bust measures. 10 cents.



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Sizes 6, 8, 10 and 12 years. 10 cents.



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No. 720—Boy's Sailor Suit  
Sizes 6, 8 and 10 years. 10 cents.



No. 750—Dress Sleeves

Pattern cut for 32, 36 and 40 inch bust measures. Quantity of material required for double-puff sleeve with cuff, two and one fourth yards of twenty-two-inch material, or one and one half yards of thirty-inch material. Material required for three-quarter sleeve, one and three fourths yards of twenty-two-inch material, or one and one fourth yards of thirty-inch material. Material required for leg-o'-mutton sleeve, one and three fourths yards of twenty-two-inch material, or one and one half yards of thirty-inch material. 10 cents.



No. 656—Bolero Waist with Guimpe  
Sizes 12, 14 and 16 years. 10 cents.



No. 657—Gathered Skirt  
Sizes 12, 14 and 16 years. 10 cents.

No. 776—Misses' Five-Gored Gathered Skirt  
Sizes 12, 14 and 16 years. 10 cents.



No. 747—Housewife's Apron  
Sizes 32, 36 and 40 inch bust measures. 10 cents.



No. 629—Tight-Fitting Corset-Cover  
Sizes 34, 36, 38, 40 and 42 inch bust measures. 10 cents.



No. 721—Square-Yoke Nightgown  
Sizes 32, 34, 36 and 38 inch bust measures. 10 cents.



No. 640—Fancy Coat with Triple Collar  
Sizes 34, 36, 38 and 40 inch bust measures. 10 cents.

No. 792—Misses' Pinafore Waist  
Sizes 14, 16 and 18 years. 10 cents.  
No. 793—Misses' Plaited Skirt—Five Gores  
Sizes 14, 16 and 18 years. 10 cents.



No. 749—Princess Petticoat  
Sizes 36, 38, 40 and 42 inch bust measures. 10 cents.

Our Fall and Winter Catalogue of Fashionable Patterns will be ready October 1, 1906. Send us your name and we will mail it to you free of cost

## ALL PATTERNS 10 CENTS EACH

When ordering be sure to comply with the following directions: For ladies waists, give BUST measure in inches. For skirt patterns, give WAIST measure in inches. For misses or children, give age in years. To get BUST and BREAST measure put tape measure ALL of the way around the body, over the dress, close under the arms. Order patterns by their numbers. Satisfaction guaranteed or money refunded.

FREE We will give any THREE of these patterns for sending TWO yearly subscriptions to FARM AND FIRESIDE at the regular price of 25 cents each. When ordering "write your name and address distinctly."

We will send FARM AND FIRESIDE One Year, new or renewal, and any ONE pattern for **Only 30 Cents** For other new and up-to-date designs see page 20



**Cost of Producing Milk**

**A**N ILLINOIS dairyman who milks a mixed herd of thirty-two cows has undertaken to keep books and figure out what it costs to produce an eight-gallon can of milk. The name of this farmer is Edward Landwer, who owns an eighty-acre farm on the border line between Cook and Lake counties. He is in a famous dairy region that helps to supply Chicago with its dairy products.

Landwer claims that his herd of thirty-two cows produced in one year 2,884 cans of milk. He shipped the whole product to Chicago, receiving eighty-five cents a can for it. He sold thirty-two calves at \$3 each, amounting to \$96 and he disposed of fertilizer to the amount of \$240. He foots up these three items as his total receipts. They aggregate \$2,787.40.

He lists his expenses as follows: Bran, \$245; corn, \$55; fodder, \$125; hay, \$400; pasture, \$100; care, \$1 a head a month, \$384, and interest on the investment \$192. Total \$1,501. Balance from the receipts, \$1,286.40.

Making use of these figures the dairyman arrives at the conclusion that it having cost him \$1,501 to produce 2,884 cans of milk, the cost of a single can of eight gallons is 52.04 cents.

In this statement Landwer estimates that a cow will drop manure to the extent of a ton and a half in a year, and that the fertilizer is worth \$5 a ton, so he credits each animal with \$7.50.

Usually it is the men who own the blooded herds who have the greatest penchant for dropping into figures and for keeping books on a dairy herd. But there is not a full-blooded animal in Landwer's herd. The cows are of mixed breed, they may have come from as many different states as he has animals, for mixed herds in this locality largely are bought at the Chicago stock-yards where they bring all the way from \$40 to \$65 a head, according to when they are expected to come fresh.

The cows largely come from Iowa, Wisconsin, the Dakotas and other Far Western states. They are received by the car-load and are distributed to different farms. From the station at which Landwer ships his milk every day in the week, more than 21,000 quarts are sent to the Chicago market. Of this quantity about 14,000 quarts are bottled and 7,000 quarts are in the eight-gallon shipping-cans. At this station, which is Barrington, one hour out on the Northwestern road, the receipts from milk shipments are \$40,000 a year, an increase of about \$10,000 in six years.

Some of the dairymen are using blooded cows, all of the Holstein type, but the greater majority of the dairymen in this locality are sticking to the common or mixed breed.

Illinois. J. L. GRAFF.

**Agricultural News Notes**

The United States Department of Agriculture has now become a great clearing-house of agricultural conclusions.

In Uvalde County, Texas, much honey is made from catclaw and guagilla, also from the mesquite. The honey from the latter is of a more inferior quality.

It is now estimated that rice constitutes fully one fourth of the world's food. The rice crop of the United States in 1904 was valued at \$14,000,000. This country now ranks fifth in the order of the world's production.

The rapid increase in the number of artificial-ice-producing plants (factories) is shown by the following: In 1870, four; in 1880, thirty-five; in 1900, seven hundred and seventy-five, with a working capital of \$38,000,000.

The leading apple-growing counties in the United States, are Benton and Washington, in Arkansas; Niagara and Wayne, in New York, and Marion, in Illinois. There are nearly a million of bearing trees in Marion County, and the best yield since 1902 is expected this year.

Dr. D. E. Salmon, V. S., a graduate from Cornell University, who for twenty-one years was chief of the Bureau of Animal Industry, in the U. S. Department of Agriculture, is now employed by the government of Uruguay, to organize and conduct a Bureau of Animal Industry.

The Minister of Agriculture of Argentina proposes to establish a more rigid inspection by expert veterinary officials of the frozen and chilled meats exported to foreign countries. The expenses are to be covered by a tax of two cents for sheep or lamb, and eight or ten cents per head of cattle.

## GUARANTEE

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ASHLAND, O.

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We guarantee Dr. Hess Stock Food to cost less than a penny a day for Horse, Cow or Steer, and that it will require but one tablespoonful (1-24 of one pound) per day for an average hog.

We guarantee that three pounds of additional live weight per steer will cover the cost of feeding Dr. Hess Stock Food one month.

We guarantee one pound of additional live weight per average hog will cover the cost of feeding Dr. Hess Stock Food one month.

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## It Means What It Says

Dr. Hess Stock Food is always sold under a positive written guarantee. If it does not do all we say it will, your money will be refunded. This guarantee is not a "grandstand play." It is not put out with the belief that anyone who is disappointed would rather say nothing than ask for their money back. If anyone is not satisfied with the results obtained by feeding Dr. Hess Stock Food, we ask and expect that they will get their money returned. We issue our guarantee to show that we, who know Dr. Hess Stock Food better than anyone else, believe thoroughly and sincerely in its efficiency.

# DR. HESS STOCK FOOD

was formulated by Dr. Hess (M. D., D. V. S.), who is a physician, a veterinary surgeon and a stock feeder of long experience. The prescription was used by him in his private practice with great success before the food was placed upon the market. Hence our faith in this preparation is based, not upon theory, but experience. It is not a condimental food, but a scientific stock tonic and laxative, that enables the system of the animal to convert a larger portion of the nutrition of the food into solid flesh and fat. It shortens the feeding period of any animal 30 to 60 days. It also relieves the minor stock ailments. Feed your hogs Dr. Hess Stock Food regularly as directed, disinfect the pens, hedging and feeding places once a week with **Instant Louse Killer**, and if you have any loss from disease, this positive written guarantee says that your money will be refunded.

**100 lbs. \$5.00**

**25 lb. pail \$1.60**

Except in Canada and extreme West and South.

Smaller quantities at a slight advance.

Where Dr. Hess Stock Food differs is in the dose—it's small and fed but twice a day, which proves it has the most digestive strength to the pound. Our Government recognizes Dr. Hess Stock Food as a medicinal tonic.

Veterinary advice given free. From the 1st to the 10th of each month by naming this paper, stating what stock you have and what Stock Food you have fed, we will furnish you free veterinary advice and prescriptions. Enclose two cent stamp for reply. Dr. Hess 96 page Veterinary Book will be mailed free or giving the above information.

**DR. HESS & CLARK, Ashland, Ohio.**

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**Instant Louse Killer Kills Lice**

You cannot be well unless your stomach and bowels are right.  
The thing to right them is **Jayne's Sanative Pills**  
At your druggist's.

**PLEASE READ THIS.**

The picture shows pattern No. 5616, the Ladies' Work Apron, Sleeve Protector and Cap. Excellent shaping is given to the Apron by the seams in front that extend from the shoulders to the lower edge, and by darts at the sides. The straps are arranged over the shoulders, fastening to the Belt in the back. Two Pockets are a useful feature, but they may be omitted if preferred. The sleeve protectors extend from the wrist to the elbow, and are full enough to accommodate the dress sleeve. Checked Gingham, Sateen, Butcher's Linen, Chambray and Holland can be used making these garments. We will send THE HEARTHSTONE all the rest of this year and this set of patterns, for 10 cents. THE HEARTHSTONE has been published for nearly 16 years. It comprises from 20 to 32 pages each issue, is printed on good paper and is Clean, Bright, Timely, Helpful and always Interesting. Departments are devoted to The Kitchen, Fancy Work, The Home Nook and The Social Circle. The latter department is, as one subscriber writes: "As good as a visit from one's friend."

THE HEARTHSTONE is not an advertising sheet and does not accept medical or liquor advertising at any price. There is no other paper just like it. For only 10 cents in silver or stamps we will send THE HEARTHSTONE all the rest of this year on trial together with the Work Apron, Sleeve Protector and Cap patterns as described, and guarantee complete satisfaction or return the money. Address: **THE HEARTHSTONE, 52 Duane St., New York.**

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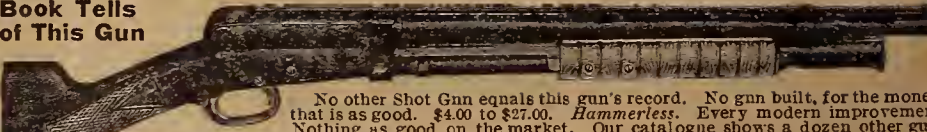
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