

## AGRICULTURAL.

### Christmas at the Peters Farm.

Here's merry Christmas come again, 'an all my children's home:  
Sam's in from New York city, 'nd Corneel's come down from Rome;  
Amanda and her young uns, and my darter Susan's boys,  
Arrived last night at ten o'clock with trunks 'nd bags, 'nd noise  
Enough to last the hull year through, 'nd plenty more 'o spare.  
But what's the odds? Noise ain't the worst of the ills we have to bear.  
I had a gift for every one this mornin' on the tree,  
'Nd what I gave 'em was the sort as used to come to me  
Long years ago, when 'pa an' ma was managin' the place.  
But, Lord! they didn't please the kids—that's judgin' by their face.  
I'd apples an' hard cider till you couldn't hardly rest,  
And all the presents that I gave was of the very best.  
I got 'em at the village store for fifty cents in cash,  
'Nd fifteen pecks o' winter wheat, a keg o' sour mash.  
Two loads o' hay some butter, and a promise of some eggs—  
The cost was pretty heavy for a man with shaky legs,  
But as I thought it over, why, I didn't really mind,  
As long as they'd be happy 'nd be pleased with what they'd find;  
Which I don't think my grandson was, because their city ways  
Has played old hob with Christmas as 'twas had in my young days.  
Amanda's boy, Ulysses, when he got his worsted mitts,  
Looked madder than a hatter in his very maddest fits;  
'Nd when my grandchild Bobbie got a handsome rubber ball  
That whistled when you squeezed it, he began to kick and squall.  
Same way with Sam's small family, includin' of his wife—  
I never seen a woman so upset in all my life  
When what I had for her came out—jest why, I did not know,  
For my wife used to beam when I gave her a calico.  
In fact, in twenty presents that I bought and gave away,  
Not one of 'em seemed pleasin', an' it sort of spoiled my day.  
'Nd what is worse, they've brought me down some fancy sort o' jugs—  
They called 'em Royal Woostershire—the handles looked like bugs;  
'Nd slather'd on the side of 'em two great green dragons sit.  
Sam brought a watch-chain made o' gold that doesn't seem to fit  
The old man's waistcoat—sort o' makes me look too kind of loud,  
'Nd altogether the result don't seem to make me proud.  
I sort of can't help thinkin' that the things they've brought to me  
Are worth three times as much as mine for them upon the tree,  
'Nd when I see 'em actin' like as though they wasn't glad  
To get the things I 'em—why it makes me mighty sad;  
It makes me pine for Christmas with its true old-fashioned ring,  
When gifts was incidental, 'nd the season was the thing.

—[Harper's Magazine.]

### Live Stock.

We can not give up stock growing on the farm, for the fertility of the farm must be maintained and our pastures be utilized; our crops of grass and forage and grain, too, should all be fed on the farm.  
We all know that much more and a very much better class of live stock could be kept with profit by the majority of our farmers than they now have, and the system of heavy cropping and selling of nearly all of the grain, hay and straw from the farm, and putting nothing back, practiced by so many farmers, is entirely wrong, and it is only a question of time when these farms will not produce enough to pay the taxes on them. The breeding of all kinds of live stock in the country, especially of animals possessed of the higher qualities and the best breeding, should be encouraged in every way.  
The up-grade of sheep and the dairy has been attained on the line of the improved breeds. The hogs, too, have been quite universally improved, and scrubs have given place to high grades and full bloods of the various improved breeds. Cattle and horses must follow the established law of improvement, and when farmers learn the necessity of breeding to only pure bred bulls and stallions they will then ensure the success of stock raising on the farm. The grade sire of any and every kind is a delusion, and a sire as the father of scrubs is a step backward from full blood sires.

**About Sheep.**  
The Merino crossed with the Southdown makes a superb all-purpose sheep, profitable both for wool and mutton.  
The Southdown is the best mutton sheep in the world, and is doing more than all of the other sheep to introduce good mutton into common use in America.  
The production of mutton should always be profitable. It can be grown more cheaply than beef or pork, because the wool so largely pays the cost of feeding.  
In the absence of an efficient dog law, strychnine and the double-barrelled shotgun are the only hope of the sheep grower. Use them liberally, but with circumspection.  
Buy the latest improved, best bred, pedigree mutton sheep, such as the Shropshire, Oxford or Hampshire down. If you must go in debt for anything, let it be for a few, at least, of the best sheep.  
Sheep kept on farms in small flocks are more profitable per capita than those kept in large flocks, for the reason that they are more easily handled, and are consequently better cared for.  
A sheep that starts to go down goes down fast. Dry feed is not good for sheep, as their digestion is not strong enough for it. This causes disturbance of the liver. A

great many diseases of sheep are attributable to this cause. What is absolutely necessary for sheep is green, succulent food to keep the bowels and other vital organs in good working condition. Roots are of great value; they contain about eighty-five per cent of water, and on account of this watery nature are easily assimilated by the sheep. Ensilage, in good condition, is good food, judiciously fed. With it may be given a moderate amount of dry feed.

### Care of Horses.

If you have any doubt about a colt being well enough bred to keep for a stallion, do not give him the benefit of the doubt, but geld him. There will certainly be plenty of stallions without him.  
If we would succeed in our calling we must conduct things intelligently—we must go to some trouble and expense to get the use of the best sires, and we must not stand on a few dollars' extra for their use. The cheap grade nondescript stallion should not be used at any price.  
Large size is the chief element of strength in the draft horse. Let us breed for size with all the good qualities to be had. We want good mares to get the best results; then carefully grade up to high class sires, and the result will give us high-priced horses that will be wanted in all the markets of the world.  
The colt is foaled strong and healthy, but before it is a week old it is infected or poisoned by laying down on filthy manure, which is alive with microscopic insect life, and before another week is dead in spite of veterinary skill. Care then should be taken to keep the floor well bedded with clean straw.  
The best and only thing to do when your horse is excited is to calm him down. This is best done by getting to the horse's head and talking to him gently, rubbing his face and other wise diverting his attention from the subject of his fright. If the horse is sullen and angry the same treatment will be found beneficial. In the high state of excitement the horse does not comprehend what you want, and it is useless worse than folly, to attempt to beat the fright out of him.

### Intensive and Extensive.

I believe it is true, that there is a period in the life of every farmer, when there comes to him a strong desire to extend his business, says Josiah D. Smith in Hoard's Dairymen. He argues that it will take no more provisions to supply his own family, that it will require but little more outlay for teams and tools, on the large than on the small farm. There is some truth in this of course and this man may have the business capacity so to superintend and systematize his work as to make it a complete success. But, while one will be completely successful, ten will fail utterly. There are so many unforeseen difficulties and hindrances, that are almost sure to come, that make in the end failure of what looked in the future like certain success.

On many farms there are a number of acres that do not cut one-half ton of hay or afford pasture enough to feed a sheep. Such land thoroughly tilled and fertilized with 500 lbs. of phosphate will grow the largest kind of ensilage corn and the manure made from the corn put back upon the ground will make it capable of producing heavy crops of grain or hay. The particular advantage which comes from intensive farming, is that the income can be so largely increased, without any great increase in expenses.

To illustrate. A young couple in early life buy a farm, that will keep 16 to 18 cows. They go in debt for a large share of the purchase price, but by industry and economy, they succeed finally in paying it. An only son has grown to young manhood, and begins to talk of securing a home of his own. His parents begin at once to say, "our farm is too small for two families." So as an adjoining farm is for sale, the boy buys.  
Suppose on the contrary the father had taken his interest money, and indeed his surplus income for a few years and expended the amount in buying extra fertilizer, procuring better stock, in short making the old farm produce more than both farms will. How much better in every way. There are so many advantages to come from intensive rather than extensive farming, that I consider it of sufficient importance to demand greater attention than has hitherto been given it. It has taken the dairy world a long time to find it out, but they are coming to see that there is a deal more profit in keeping one cow that will produce 300 pounds of butter, than in keeping two cows to accomplish the same result. I have seen meadows so poor that 50 to 60 acres were gone over to secure sufficient hay to keep ten or fifteen cows, and in the same town have seen nine cows and a horse wintered on the hay grown from that number of acres. Let us concentrate, intensify, and in its broadest, truest sense we shall extend our business by increasing profits.

### Breaking Up Sod Land.

In breaking up sod land for corn, particularly that which is in fair condition but which has been under ordinary farm management, if fertilizers only are to be used, apply those which are rich in potash. Use materials which will supply, 80 to 100 pounds of actual potash, from 25 to 30 pounds of phosphoric acid, and from 15 to 20 pounds of nitrogen per acre.  
If "special corn fertilizers" is to be used, apply only a moderate quantity, say 400 to 500 pounds of muriate of potash. It is believed this combination will produce as good a crop as 800 to 1000 pounds of "corn fertilizer," and it will cost considerably less.  
With ordinary barn-yard manure or stable manure for corn, use potash. Four cords of manure and 100 pounds of muriate of potash per acre.  
For fodder or ensilage corn, use either in fertilizers or with manures about one-fourth more potash than above recommended.  
In our experiments all fertilizers and manures have been applied broadcast and harrowed in.  
One frequently gets credit for what he does not possess.  
Natural shoe blacking has been found in a mine in Utah.  
Supper, eaten in a recumbent position was the principal Roman meal.  
Mrs. Lushforth—"And to think how I used to pray for you—Mr. Jaggs Lushforth—"Well, you finally got me, di—hic—didn't cher!"  
This then was the difference between the

## HYPNOTISM AND CRIME.

### Can Induced Impressions Lead to Irresponsible Acts?

The average person has just enough awe and respect for the seeming supernatural to enable him to pursue eagerly any exposition or development of the mysterious which may be made in the progress of psychic force. It matters little to this average person whether experiments in psychology puzzle the scientists or are accepted as entirely within the range of human reason.  
The purpose of this article is not to treat of hypnotism in extension, but to touch on the use and abuse of hypnotism in criminal cases says the New York World. Before coming directly to the point it will be found interesting and useful to review briefly a celebrated and remarkable case, which two years ago claimed the attention of the civilized world.

Michel Eyraud, a Parisian and criminal, after wandering over two continents, was captured in Havana, taken back to Paris, there convicted of the murder of M. Gouffe by strangling, and duly guillotined. His confederate, Gabrielle Bompard, was sentenced to twenty years' penal servitude. Before the trial it was brought out that Eyraud possessed the most remarkable hypnotic power, and the girl herself, perhaps with the cunning of a criminal, declared that she had been led to assist in the crime merely through the exercise of Eyraud's baneful gift. Be this as it may, the theory impressed the department of justice to the extent that a hypnotic experiment was made on Gabrielle before a party of scientists and officers of the law, and under the influence of a celebrated hypnotist the woman was compelled to go through all the details of the tragedy in the Rue Troncu Ducoudray. After the experiment the hypnotist Garanger called the attention to the fact that this woman, whose record had been fairly good, against whom the police could bring nothing, had by the power of a stronger will "been made to behave like a fiend, without conscience."

The news of the experiment spread like wildfire throughout Paris and the interest of sensation-loving Parisians was stimulated to the highest pitch when it was rumored that the experiment would be repeated in open court. In this, however, they were disappointed and the trial proceeded and ended without the startling features hoped for. But Eyraud took his cue from the theory of the hypnotist and just before his trial advanced a theory, which, unfortunately for him, did not save his reputation or his head. He admitted frankly that he strangled Gouffe, "yet," he added, "am I guilty? Was it I or some will stronger than mine which brought this man to his death? As I dominated Gabrielle Bompard an unseen power dominated me. I know it, I feel it; there are times when I am unaccountable for my actions. They know that I have hypnotic power, yet they will not shut me up among the madmen. They know that I am possessed of some psychic force untraveled and unintelligible to others, yet they will not say that it can lead a man unwittingly to murder. Am I naturally cruel? Do I not love my family?"

"In my soul I know that I have two natures. One, the good, I control myself; another, the bad, is beyond my mastery. In one character I am a good husband, good father; in the other I am an assassin."

The story of Eyraud has thus been recapitulated because it is a fitting introduction to the strange scene that has just been enacted in a court room at Santa Rosa, Cal. Unlike the president of the French chamber of justice, the California judge listened respectfully to the theory of hypnotism, and permitted an experiment to be made in the court room in behalf of the man arraigned. This man was Edward J. Livernash, and his crime has already been outlined in the dispatches, if crime it can be called. Livernash had gone from San Francisco to Cloverdale, a little town ninety miles distant, and had shot and severely wounded an old man, Darius Ethridge, against whom he had no grudge. Giving evidence of an unbalanced mind, he was taken to the Napa asylum, from which he was released a few weeks ago. His last appearance in court was the result of a suit brought by his victim, Ethridge. The supporters of the theory of Livernash's utter irresponsibility were Dr. Gardner, superintendent of the asylum, and Dr. Robertson, professor of mental and nervous diseases at the California university. They called his disease somnambulism, or autohypnotism, a condition of trance similar to that of a hypnotized patient, which changed a man normally bright to one dull, querulous, secretive, and irritable.

Dr. Robertson explained that a man suffering from somnambulism is a changed being. His entire mental and moral condition is reversed. In most cases, the doctor testified, "the abnormal condition is brought about by an outsider, but in some cases it is imposed by extraneous objects. Women look into a mirror and hypnotize themselves. When patients have been hypnotized by the ringing of a bell that condition may unintentionally result from bell-ringing. In about one-third of the cases hypnotism is impossible. Another third was particularly susceptible because of inherited tendencies in this case. This patient was unusually susceptible. His father was a peculiar man. His mother on the borderland of insanity. He sat with his brother many times when the latter went into his hypnotic trances, and this fact undoubtedly was largely responsible in bringing about the defendant's condition, as the somnambulist is frequently imitative."

Perhaps this is the state that Eyraud blunderingly attempted to explain when he maintained that he was dominated by some psychic force hitherto unrevealed. At all events it prepared the audience in the court room for the experiment, publicly made for the first time, of throwing a man into a hypnotic trance and forcing him to live over again the actual story of his crime. This part of the programme was faithfully carried out. So far was Livernash under Dr. Gardner's hypnotic influence that pins were stuck through his hand, cheek and ear without the slightest indication of bodily suffering. Then, in obedience to the physician's command, he answered all questions quickly and intelligently. Of course there was every evidence of mental hallucination, but the object was to show what he did and not why he did it. The doctor merely claimed that they could put him in the condition in which he was when he committed the crime, and thereby demonstrate all the wild theories and vagaries of a somnambulist. In consequence the utter absence of a motive or governing cause was immediately shown.

This then was the difference between the

cases of Gabrielle Bompard and Livernash. The woman had no vagaries. She was merely dominated by a stronger will to commit a brutal crime in the most heartless manner of fact way. Livernash, as a somnambulist, was controlled by his own diseased imagination. If the experiments proved anything they proved these facts, and the further fact of popular or judicial incredulity does not lessen the general interest or curiosity.  
It is not necessary to give the details of Livernash's testimony while in the trance. He differed in no essential manner from any other hypnotic patient. He answered only the questions put to him by the man Dr. Gardner commanded him to answer, and only when the doctor himself asked a question he refused to reply until the man had given his permission. When at last he came out of the trance he showed no effect of the experience save in the heightened color of his cheeks.

The day following the hypnotic experiment Livernash appeared on the witness stand to testify in his own behalf. As to the important events of the crime his mind was a blank, and he was able to recall only flashes of reason that came to him during his somnambulist spell. This, however, was not important, as any criminal would be smart enough to take his cue from the line of "defense. But the testimony of his wife, his sister, and the doctor was strong corroboration. Further than this, Dr. Gardner himself went on the stand, and his testimony as an expert is entitled to considerable respect. The doctor argued that while the shooting, taken apart from other acts, might have been done in a same moment, it was not probable that Livernash could stimulate the hypnotic condition, and he was quite positive that the simulation could not have been maintained. Moreover, in addition to the five tests, he had subjected Livernash to the ammonia test, that is, he had held under his nose a bottle of concentrated extract of ammonia three times the strength of the essence, and he had never winced. If he had been shamming he could not have withstood the shock. The doctor said further that though the man who resists hypnotism cannot be hypnotized, if he ceases resistance and puts himself under control of another once or twice, it is doubtful whether he can again summon sufficient power to resist hypnosis. In answer to the question whether it was not dangerous to allow a man like Livernash to roam at large, a very interesting theory was developed. Dr. Gardner claimed that Livernash was entirely subjugated to his (the doctor's) will and could "do nothing as long as he controls him. Then, too his health may be built up so that this somnambulist condition will not recur."

The two cases of Livernash and Gabrielle Bompard are the most thrilling, the most striking examples of hypnotic influence in crime. That such cases exist is, therefore, not to be denied. That they will be accepted frequently in courts of justice is, however, highly improbable. Such eminent French authorities as M. Gaillot and Dr. Chacot have condemned the abstract proposition because it attacks the principle of perfect freedom in self-defense and because, as M. Leville claims, if a hypnotist has absolute power over the hypnotized the replies may be echoes rather than confessions. Still, there are cases, like those cited, where innocence may be established, and doubtless Dr. Brouardel is right in the assumption that when the accused person shows evidence of nervous disorder it is the duty of medical science to employ every means for determining whether this person's conduct is or is not under the immediate influence of abnormal conditions.

## ELECTRICITY ON THE FARM.

### Everything Done by the Motor Except the Lifting of the Mortgage.

A vast field for electricity is opening up in its practical application to farm work, and the discussions of this subject in various engineering journals has created considerable interest. The "Electrical World" has begun the publication of electricity to the various farm operations and implements, with illustrations of a plant which is situated in one of the finest agricultural States of the West, and which shows in detail how the electric motor can be made to perform most of the work which the horse or the steam engine is now called upon to do.

There are four classes of farmwork to which electricity is applicable. First for power purposes; second, lighting; third, heating; and fourth, for the operation of telephones, signals, alarms, &c. Examples under these various heads are numerous. For instance, hay, grain, and other products can be hoisted by electric power, which can be also applied to ordinary elevators. An electric motor may run pumping apparatus, which will furnish water for the drinking troughs, for fire purposes, or for watering the garden, use in dairy houses, &c.  
All such miscellaneous machines as threshers, grinders, shellers, hay presses, grinders, &c., can be readily operated by electric motors. It is very probable that in time electric railway lines may exist over the best agricultural regions, furnishing communication between the different farms as well as small tramways on separate farms, connecting the different buildings, while electric ploughs and vehicles of all sorts are among the possibilities.

### To Prevent Washouts in Grain Fields.

If comparatively level fields are sown to wheat or rye, furrows should be made that will quickly carry off all the superfluous water. The furrows should follow the lowest portion of the field, even if it be a tortuous course. It is best to do this immediately after seeding, but it may be done at any time before the ground becomes frozen solid. Of course, some of the grain will be destroyed, but by scattering, with a fork or shovel, the upturned soil, only the plants in the immediate channel will be lost, and this precaution often saves ten times that amount being drowned out or stunted in low places. If grain occupies the steep hillsides, furrows should be made from the lowest places leading down and horizontally around the hill, thus conveying much of the surplus water to the direct portions. If the furrows are gradually sloping, washing will be prevented. If the hill is quite steep several furrows should be drawn, thus diverting heavy rainfalls into several channels, with consequent less danger from washing or overflow.

Doctor—"My good woman, does your son stutter all the time?" Peasant—"Not all the time, sir. Only when he attempts to talk."

## MR. AND MRS. BOWSER.

The Sunday morning program in the Bowser mansion differs considerably from the week-day morning program. At breakfast time Mr. Bowser says he isn't feeling very well and won't attend church. Half an hour later he guesses he will go. Fifteen minutes after that he has decided to remain at home. Mrs. Bowser replies that she has a headache, and also feels inclined to skip church service, but the words have hardly been uttered when Mr. Bowser remarks:

"We'll go to church, of course. I don't propose to allow our neighbors to class us among the heathen. It's an example we owe to the world at large, even if we are not religiously inclined. I'll start about getting ready right away."

Mrs. Bowser draws a long sigh. She likes to go to church, but she dreads the preliminary exercises. The said exercises begin about thirty seconds after Mr. Bowser has disappeared upstairs. They invariably start off with:

"Oh, Mrs. Bowser!"  
"Yes. What is it?"  
"Have I got a change of shirts in this house, or have they been sold to the rag buyers?"

"Your shirts are in the second drawer of your dresser, of course!"  
There were five of them lying there, but he had opened the drawer without seeing them, as usual. He returns and discovers them, and nothing is heard from him for as much as two minutes. Then he suddenly yells:

"Mrs. Bowser, are you dead?"  
"Well, what is it now?"  
"Is my Sunday suit in the ash barrel, or did you give it to a tramp? I've looked the whole house over more than forty times, and it is not to be found!"

"It is hanging up in your closet, of course."  
He opens the door, and to his great surprise his best suit is hanging on the hooks before his eyes. He yanks each separate garment down and flings it on the bed, and then returns and peers around and rushes out to call over the baluster:

"Mrs. Bowser, will you ask the girl to look in the coal bin and hunt me out a collar? If you are going to keep 'em down there, why didn't you tell me and save me an hour's time!"  
"You collars are in the first drawer of your dresser. It is curious how blind a man is, even in the daytime!"

The collars are there, of course. They have been kept in that same drawer for seven years, but he never found them until after he had looked under the bed, in the closet, and out in the hall. Mr. Bowser consumes about three minutes in getting into a collar, and then Mrs. Bowser is saluted with:

"Mrs. Bowser, will you kindly condescend to come up here? If so, you will put me under everlasting obligations!"  
"Well, what is it?" she asks after toiling upstairs.  
Mr. Bowser stands in the center of the room, without coat, vest, socks, or necktie, and with suspenders hanging off his shoulders.

"Socks, Mrs. Bowser, socks!" he whispers, with a wave of his hand. "I've been buying socks all my life! I've bought over a billion pairs! I ought to have at least one old sock, with a hole in the heel, around here somewhere, but where is it? I've hunted upstairs and down—on the roof and out in the back yard—but all in vain. Perhaps you will kindly—"

"See here!" she interrupted as she walked over to the dresser and pulled out a drawer. "Here are eight or ten pairs of socks! They have been kept in this drawer ever since we lived in this house! Why didn't you look in here?"

"H'm. I see!" he muttered. "Mrs. Bowser, don't play that trick on me again! I'm good natured itself, but I know when I'm imposed upon!"  
"And now I suppose you've looked into the furnace, and out in the barn, and all over the alley after a necktie, and been unable to find one?" she demanded.

"Exactly, Mrs. Bowser! I've been hunting for two long hours, but I can't find what you have given the cook to kindle fires with!"

"My dear Mrs. Bowser, I am sorry indeed to trouble you, but will you look under the kitchen sink and see if you can find a pair of cuffs for me?"  
"Didn't you find a collar in one of the drawers?" she demanded in reply.

"Yes, after two years of persistent search."  
"Well, you have eight or ten pairs of cuffs in the same drawer!"  
"Exactly, I see the drift of this thing!" muttered Mr. Bowser, as he scattered the whole collection over the dresser to select a pair. To his own great amazement he happened to see his sleeve buttons as well, and to fit them into the clean cuffs without breaking down any doors or knocking off any plaster. To his further amazement he got into his coat and vest without the bedstead falling down or the lavatory exploding, but wonders suddenly ceased. He began to twist and hunch and growl, and then strode to the baluster and shouted:

"Is any living soul downstairs?"  
"I am here, of course," replied Mrs. Bowser.  
"Oh, you are! I didn't know but you had expired! Being you are still alive, might I presume to inquire what your particular object was in sewing up my coat and vest? Did you start out to make bags of them? Were you going to use those bags to hold catnip, smartweed, and other herbs?"

Mrs. Bowser climbed the stairs and walked in on him again. As he squared off and hunched up his shoulders she said:  
"Mr. Bowser, your suspenders are hanging about your knees! If you would remove your coat and slip them over your shoulders you would feel more comfortable."  
When she had gone Mr. Bowser carefully dropped his Sunday coat on the floor, his vest at the foot of the bed, his pantaloons at the corner of the dresser. He tossed his cuffs into the closet, his necktie on the bed, and got back into his everyday rig. Then he descended into the family room with great dignity.

"No, ma'am, I am no hypocrite! If a hypocrite belonging to this house wants to go to church and pretend to be interested in religious matters she can go; but as for me, I will not dissemble. This is the worst-conducted house in America, and I have put up with more than any other husband on the face of the earth, but I will not play the hypocrite! You can go to church, and I will stay home and rip and cuss and tear around and get drunk and murder somebody."