

## REALRURALREADING

WILL BE FOUND IN THIS DEPARTMENT.

Two Valuable New Varieties of Tomatoes—Cheap Breeding House for Poultry—Convenient Farm Wagon—Trees Tapped More than Once.

### New Tomatoes.

Hardly any other vegetable is as variable in its character and form as the tomato. Changes are going on constantly, new varieties are coming to the front, and old ones disappear from the seed lists. Among the most promising varieties of this year's introduction is the Crimson Cushion, introduced by



CRIMSON CUSHION—TOMATO, THORNBURN, NEW YORK.

Peter Henderson & Co., New York, who consider it the earliest large tomato. It belongs to the Ponderosa class, but is a decided improvement over its first representative. It is more symmetrical in shape, thicker through stem to blossom end, frequently almost globular. The color is brilliant scarlet crimson, untinged with purple, and ripens up completely to the stem. It is almost seedless, flesh firm, meaty, and of the best quality. Tomato, Thornburn New York, introduced by James M. Thornburn & Co., is a sport of the Acme. As will be seen from our illustration, it differs in form from all other varieties, being hexagon shaped, and unusually deep. Its color is deep red, with a purplish tint, and it is altogether handsome and unique.

### The Height of Grape Trellises.

Trellises are built much higher in this country than they are in Europe. We get our ideas of what the grape vine needs by seeing the wild vines in woods climbing to the tops of high trees and bearing their best fruit at the highest point. American grape vines require more room than is usually given them. In Europe the vineyards are set in checks like our corn fields, with a vine tied to a stake not more than four to five feet high, and each bearing only a few bunches of fruit. We have seen many grape vines, each of which covered a large trellis and bore two to three bushels of fruit every year. Such vines if rightly managed and pruned keep in better condition than those that are restricted for room. In most vineyards that we have seen, the owner after a few years wishes that the vines were twice as far apart as they are.

### Breeding House for Poultry.

Small breeding houses have come to be considered almost a necessity upon the average farm as well as in the yards of the fancier. The farmer has learned that it is economical and much more satisfactory to pick from his flock the most promising pullets and a well-bred male and place them in a commodious yard with a snug little house of their own. From this yard will come all the eggs that can be used for hatching. The eggs from hens laying the entire range of the farm may be disposed of in the general market and used for household purposes.

The accompanying illustration is of a small breeding house, which has been in use for three years. It was originally a large organ box and has been extra material was needed to complete it. A half inch, tar paper, hinges, hook and staple, and a few boards



A SMALL BREEDING HOUSE.

picked up about the farm were all the extras needed. This house accommodates in perfect comfort a pen of eight or ten hens and a rooster.

### Patience with Teams.

The quality of farm help is more nearly tested by its ability to manage a team without abusing it than by any other one thing. The horse is a sensitive, nervous animal, and if abused, as it often is, it soon becomes restless, and finally obstinate and vicious. A great many horses are ruined by the poor quality of farm help, which is now so common. If better help cannot be procured it may be necessary to do as is done by Southern farmers, breed mules, which will resent ill treatment so promptly that they will be less likely to be abused than is the horse.

### Loss in Clover Knollage.

One thing which causes the loss with clover knollage is that clover is a rather nitrogenous plant, says the Indiana Experiment Station, and often he is in the silo to a high degree, which causes the passing off of a large amount of nitrogen, much the same as occurs in a pile of horse manure; at least that has been my experience in handling it. If sufficient water be used upon it, the heat is reduced and the knollage is prevented. It will be necessary for

the person filling the silo to watch pretty carefully, and if the temperature rise above 135 degrees, to keep water well poured on the surface. I do not think that any injurious results will arise from the application of water. We have ensilage here, and have received no results other than beneficial ones.

### Feeding Corn.

Corn is one of the foods that are too rich in the heat and fat producing elements, says the Ohio Farmer. It needs something that contains more of the bone and muscle-forming elements to make it a good ration. Now, the scientist tells us that the excess of carbohydrates will be stored up in the system as fat. This is, in a measure, true. But all of us common laymen know that in practice, if an animal be fed an exclusive corn diet, the storing-up process goes right on all right for a time. Then the appetite becomes clogged, there is a discouraging check in growth, and the animal takes an unthrifty appearance.

Something besides corn should be used as the grain ration, for the sake of variety if for no other reason. Redish has a great influence on digestion, and an animal will not eat with a good relish when fed on a single food for any great length of time.

### Vary the Diet of Cows.

Milk is composed of certain solids and water, and, to produce it, we must give a cow such foods as contain these elements; that is, nitrogenous foods, says the Connecticut Farmer. Those which make fat will not produce milk, nor are they of much value for manual purposes. Another point: Do not make the mistake of giving every cow in the herd the quantity or the same formulated ration. One cow will respond in milk, another will not; one will digest it all, another will not. And still another point: Give the cow, if you possibly can, a variety. She relishes a change, and, if it is a proper one, will do better for it. None of us want pie at every meal, although the pie be ever so good; so with the cow, she likes an occasional change in her diet. Give it to her.

### Low Farm Wagons.

An enormous amount of force is wasted in loading material into high farm wagons. It is fortunate that this truth is being discovered and lower gears are put into use. The accompanying sketch shows a convenient low farm wagon—commodious and light, but strong enough to make loading a very easy matter. The long body has a truss un-



CONVENIENT LOW FARM WAGON.

der it to support the middle, the chains being attached well under the body at the front, to avoid the wheels in turning. Side and end pieces can be put upon such a body, and a wagon box made if needed. Let the wheels be not only low, but let them have broad rims, so they will not cut into the land when hauling loads across the fields.

### Tapping Trees Twice.

When the tapping of maple trees was done with an axe, chopping a gash in the maple and fixing a spout to conduct the sap to the bucket, a few seasons sufficed to so scar the tree as to greatly injure its future growth and value. And after all, less sap was produced by this method than by those now used, which scarcely make a scar at all. A half-inch bit, boring into the tree at a slight angle above horizontal, will gather the sap best. It is not uncommon to put two or even three spouts into some of the best trees. If the spouts are withdrawn and the holes are filled, a healthy tree will grow over the wound in a year or two, so as to leave a very small scar.

### Wheat in Drills.

Nearly all winter wheat is now sown by the drill. There are many advantages in this method of putting in the crop over broadcasting. Not the least of these is that it affords so good an opportunity to drill mineral fertilizers in contact with the seed where they will greatly stimulate its early growth. But the most important advantage is that the drill leaves the wheat in a hollow where it can be slightly protected against all but the severest frozes. The ridge each side of it is mellowed by the frost, and when rains come it is washed down over the wheat roots. This is greatly helped by harrowing the wheat early in the spring so soon as the ground is dry enough.

### Low Tops for Fruit Trees.

The increasing prevalence of high winds has much to do with making fruit growers favor the heading out of fruit trees near the ground. There is great loss of fruit when the trees are high headed, and it is also much more difficult to gather without injury. As for the old practice of training the high head, so that teams used in plowing and cultivating can be driven under the branches, it is very rarely followed now. The orchard ought to be cultivated only when young. After it gets into bearing, seed it and pasture with sheep or swine, also adding mineral fertilizers every year.

### Pampering Young Pigs.

The young pig should have enough feed to maintain thrift, but he should not be fed as if he were being fattened. The digestion of young pigs is weak, and if overfed at this time, especially with corn, they will become stunted and never prove profitable animals. The feed for young pigs should not be concentrated. Give them a small proportion of grain and wheat middlings, with enough milk and dish water to distend their stomachs and keep their digestion in good condition. A pig should be eight or nine months old before it will be safe to feed it heavily with corn.

## NOTES ON EDUCATION.

MATTERS OF INTEREST TO PUPIL AND TEACHER.

Daily Practical Training in Manners—Use of the Hektograph in School—Classes Should Sit Near the Teacher—Good Drill on Sounds.

### Practical Training in Manners.

Ask the children daily to tell what opportunity they have improved of being kind and polite.

The teacher should remark on any improvement shown by the pupils, and lead pupils to talk of it. It is well to allow them to talk without restraint, so as to obtain their real opinions. Tact will be needed to ward off a feeling of self-gratulation or conceit, which may otherwise be brought out when pupils tell of their own polite acts.

Impress pupils with the idea that good manners is one of the subjects pursued in the schools, and that it will help them in life, and that practice shows progress in this particular branch.

Without seeming to demand it, teachers should lead children to offer them any service that is not menial. Such attentions as disposing of wraps, umbrellas, etc., fetching them when needed, picking up things accidentally dropped, handing crayon, eraser, etc., lifting or moving things, offering a chair, helping to put things in their places at the close of school, should be rendered to teachers by pupils. If, at first, in order to make children see what offices are proper the teacher must ask for them, it should be as one would ask an equal, and not a servant; and any service rendered should be most politely acknowledged.

The older children should be made to understand the propriety of assuming some responsibility over the younger. This is almost universally practiced in schools where "bosy work" is done, when the older pupils help to distribute materials for such work, and to assist in its execution. They should also assist those who need aid in putting on or taking off wraps, overcoats, etc. Children should understand that girls need not assist girls and boys, boys, but that help should be offered and accepted, as is convenient.

Pupils should be trained to receive and entertain those who come to visit the schools. They should entertain as politely in a schoolroom as in a parlor. When visitors come, a pupil should answer the bell, politely invite the company to enter, find them comfortable seats, take their wraps if they wish to dispose of them, and offer any other attention the occasion may seem to demand. To do this properly at the time implies previous training—pupils acting as visitors. In this as in other things, officiousness on the part of pupils should be guarded against. Give opportunities to all pupils in turn to show these attentions.

In the discipline of the school, when children have had training in good manners, the question "Is this polite?" will oftentimes prove more effectual than a severe reprimand. This has been demonstrated by actual experience, even in schools difficult of control.—North Carolina Teacher.

### Do Not Simplify Too Much.

We do not believe that in order to make the school work pleasant to the pupil everything must be made easy. The healthy child likes a sugar plum occasionally, but does not want all his food sugar coated. It is not easy play that is attractive to the robust boy. He spurns it, and chooses that which calls forth all his power. He delights in the consciousness of physical power. So, too, there is a joy in the severest mental effort, if it be but rightly directed and successful. Every true teacher must have watched with keen satisfaction the play of the child mind as shadowed on the countenance. He delights to mark the clouded face, the downturned eye, while the struggle for the mastery of some uncomprehended sentence or problem is going on, and to see these quickly give place to the flushed cheek, the shining forehead, and the flashing eye, which tell of victory achieved. One aim of the wise teacher will be to develop this sense of power in the child. He will seek not so much to remove obstacles out of the way as to teach the young thinker how to meet and overcome them.—Educational Journal.

### The Hektograph.

The problem of furnishing supplementary reading matter to the voracious mind of the "young idea" of to-day, is most easily solved by the use of this simple medium of reproduction, which is cheaper than any of the other "graps" or "styles" on the market. Moreover, it can be made by any teacher for the trifling cost of 75 cents:

Required:  
1 pint of glycerine..... 35  
4 ounces gelatine..... 20  
1 tin pan 8x12..... 20

Total cost..... 75  
Dissolve the gelatine in a pint of cold water. Then add the glycerine. Put upon the stove, stirring that it may not burn. When it comes to a boil pour in a shallow tin pan to cool. Beware of air bubbles and you will have a smooth, hard, sticky surface. A shallow caramel pan with upturned edges is just what is desired in the way of a pan. Eight by twelve inches, the suggested dimensions, correspond with those of the blocks of unglazed paper sold for the hektograph.

Directions: Use hektograph ink and a coarse stub pen. See that every stroke of the pen shows a green metallic luster when dry, else the work will not "take." Write or print the reading matter to be used and when the ink is quite dry lay the sheet face down upon the hektograph. Press gently over the whole surface with the hand or a soft cloth. After from two to five minutes (according to the number of copies de-

stred) gently peel the paper off. From the impression thus made, reproduce all the copies required, laying one sheet of paper on the surface at a time.

The lack of suitably graded reading matter is a source of great anxiety to the teacher still, in spite of the numerous supplementary readers published almost daily. In fact, the problem is so purely individual that material varies with almost every school. But equipped with a hektograph a teacher may gather in every field, and where other resources fail she can originate her own stories and multiply her effort. The reading matter which thus passes through the hands of the children can hardly be measured, and there is no limit to the culture obtained by contact with the best our best men and women have said, on all the varied subjects of the modern course of study.

So at the risk of purple fingers—which may be easily cleansed with pumice stone—make yourself a hektograph and there will be one burden the less, as the horror of scarcity of reading matter rolls from your shoulders.—Elizabeth V. Brown, in the School Journal.

### The Theoretical Boy and the Real Boy.

A few days ago I heard a teacher giving her experience in trying to utilize a suggestion found in a school journal. She said:

"I read in one of my papers a piece entitled 'One Teacher's Successful Management of a Difficult Case.' It told how a teacher, who had in her department a disorderly boy of nineteen, won him over to docility by kindness. His teacher brought all the love and tenderness of her vehement nature to bear on the lad. One day, the boy created a great disturbance and also made a failure of every recitation throughout the entire morning. At noon, the teacher mildly requested him to remain where he was, and complete his unfinished tasks, which he refused to do, marching from the room with the others at the signal of dismissal.

The teacher went to him as he stood with his comrades in the yard, and sweetly asked, 'Haven't you forgotten something, Harry?' The boy hung his head in shame and was about to return to his seat, when he was informed that it wasn't necessary and was requested to go home. He reluctantly departed, returning the following morning, and with tears of penitence besought the pardon of the teacher and the school.

"Well, I had a rough disorderly boy in school. I asked him to finish neglected work, which, as in the case noted, he refused to do. I took the next step, and told him to keep his seat while the others enjoyed their intermission; he left with the rest. I started to him as he was enjoying himself with his playmates.

"Here my program began to vary from the original. My boy did not display symptoms of remorse and shame. He yelled loudly and ran from me. To overtake him was impossible, so I called to him in as sweet a tone as in my breathless state I could muster, 'Did you—not—forget—something, Freddie?' The fellow stopped, turned and stared in open-mouthed astonishment a moment, then called back 'None of your business.' I guess you'd better go home.' I called after him, just as his white hair and ragged hat disappeared around a distant curve in the road.

"Well, my boy didn't return in penitence and tears next day, but his mother came instead, and what a terrible time I had with her. Her unkind remarks still haunt my memory. Freddie never came back. I lost considerable influence and reputation on account of this unfortunate episode.

"If I had not subscribed for and read that school journal in which I found the story about Harry I would have avoided the trouble with Freddie. I have made up my mind to let my subscriptions all run out, and after this paddle my own canoe."

The teacher who discoursed as above has one important lesson to learn. Theories are general, but the art of teaching must vary with individuals, and each case should be treated on its own merits. What is taught in normal schools, institutes and educational papers should be digested and adapted, not "swallowed whole," do or apt—Mary A. Carver, in the Western Teacher.

### As Good as a Game.

As good as a game to the lowest class is a lesson on changing words. It is a good drill on the sounds, and may be used with advantage occasionally.

The class is, of course, at the blackboard, chalk and brush on the ledge for use, and every pupil should try and be able to make the change as soon as the word is mentioned. Hands may be raised to denote their readiness.

Suppose the word top be taken as a beginning. The teacher says, "Change it to stop." Up go the hands at once. One scholar is selected to make the change. If he does it correctly, the hands go down again. "Change to shop" is the next problem, then shod, shed, and so it goes on through, bed, bad, bat, sat, slat, slap, steep, creep, bread, etc.

A second plan consists in the teacher making the change, while the children recognize and tell her the word.

A seat exercise may also be given by starting with a word such as mit, or man, and changing only one letter at a time. Make as many words as possible.

### Shorten Up Your Rope.

Let your classes sit near you. I would have every pupil in my class sit within reach of my hand if possible. Attention, like the force of gravity, varies inversely as the square of the distance. Whenever I see a teacher trying to hear a recitation from a pupil twenty feet away from her I want to say, "Shorten up your rope and your lead will pull more easily." That is good physics and metaphysics.—Exchange.

## TOPICS OF THE TIMES.

A CHOICE SELECTION OF INTERESTING ITEMS.

Comments and Criticisms Based Upon the Happenings of the Day—Miscellaneous and News Notes.

A wise man, being asked how old he was, replied, "I am in health;" and being asked how rich he was, said, "I am not in debt."

There are some faults slight in the sight of love, some errors slight in the estimate of wisdom; but truth forgives no insult and endures no stain.

The fact that Great Britain has sent a statement of her case to the Venezuelan Commission is pretty good evidence that Lord Salisbury is getting ready to swing himself over to the side of arbitration.

The ideals that we hold, the purposes that we cherish, are but steps in the ladder of life. There are as many above as below them; and it is a far smaller matter to stand upon any particular one than it is to know that we are steadily pursuing the upward path.

Canada, which is trying all sorts of schemes to attract settlers, is now considering one to deport the Armenians to its northwest territory, but it will not work. Three Governments—Turkey, Russia and Great Britain—are interested in keeping the Armenians where and as they are.

The new steerable balloon on trial in the German army rises to an altitude of over half a mile with a load of two tons, and can stay up a week without throwing out ballast or losing gas. The silk of which it is made is coated with a secret preparation, rendering it absolutely gas-tight. In case of future hostilities, no war department will be complete without a bureau devoted to new inventions.

The astonishment aroused in Japan by the report that our crack naval vessel, the Olympia, had been easily passed at sea by the Empress of India is absurd. A very little reflection would show that a war vessel on an ordinary cruise does not waste coal in trying to make a speed record. It would be as ridiculous for a war vessel to go at full speed while cruising as it would be for a passenger carrier like the Empress of India not to go at full speed.

We all of us very often forget that, if tendencies to physical ailments are often inherited, so are tendencies to various forms of wrong-doing. The misconduct and ignorance of our ancestors are visited upon us in both physical and moral defects, just as ours will be visited upon our children's children. In both departments also there are circumstances and conditions over which we have had no control which have largely contributed to make us what we are.

The blow which Fitzsimmons landed on Maher's jaw was a savage one, but it was not severe enough to prevent the vanquished man indulging in the pet weakness of the modern puglist. He is using his lame jaw now to declare that the blow was a chance one and that he was not in proper condition to fight. He may be right on both points. He certainly is on the last. The result shows that he was in no condition to fight; and it is a great pity that he is now in condition to talk.

What a gift some people have of finding fault! Praise anything, no matter what, and they will always confront you with a "but." It really seems to hurt them when you take pleasure in admiring anything, and they hasten to take you down a peg. Sometimes they do this because they think such a course argues an experience and observation wider and more fastidious than your own; but more often it is just a petulant habit, springing from envy or jealousy, for which the offender richly deserves to have his nose pulled, as a preventive to his turning it up in future.

In the Arkansas State penitentiary is a young man who ought to be outside the walls of that institution. He only entered it the other day, but even a day of residence therein is too long a period of confinement for such a person as he seems to be. Convicted of grand larceny in Clay County, he journeyed alone from the Clay County court house to Little Rock—a distance of more than two hundred miles—and delivered to the authorities there the official papers which set forth his crime and his sentence and which of course secured for him instant admission to the penitentiary. The precise nature of his offense is not stated, but any young man—this one is about nineteen years of age—who will keep faith under such circumstances is deserving of better treatment than a year's sojourn in a penal institution. If that young man has half a chance he will amount to something.

At a sale of unclaimed goods in a storage warehouse in San Francisco a man realized about \$1,000 on an investment of \$10.50. Among the goods put up for sale were eight ordinary packing boxes. They were offered just as they were, contents unknown, as is usual in such cases. A man named Belasco bought seven at \$1.50 apiece. The boxes had been stored for twenty years by an Australian merchant who had a branch house in San Francisco. This man, whose name was Leitch, died in Melbourne, and no claim was ever made for his boxes. Belasco took the boxes home and opened them. The first contained an old-fashioned leather portmanteau, and the first thing he found in it was a wallet full of old coins, which he subsequently sold to

a dealer for \$250. In the next box was \$50 in United States gold coin; in another, some valuable jewelry; in another, a lot of valuable books, 300 or more in all, and in others, rare stamps, carvings, and other curios. Altogether he realized or will realize, about \$1,000 on his speculation. After opening the first box he hurried out after the man who bought the eighth box in the lot, but could not find him.

The sentence passed upon Miss Elizabeth Flagler, the young woman who shot a colored boy who was trespassing upon her father's premises in Washington, is by no means calculated to begot confidence in the law and methods of administering justice. The boy who was shot was attempting to steal a pear and for this trifling offense Miss Flagler, according to the story, flew into "an ungovernable passion" and fired a revolver at him. The shot "happened" to be fatal. Tuesday the case was brought to trial. The obliging court opened earlier than in order that the aristocratic prisoner might escape publicity and after a short conversation, in which all parties became highly sympathetic, the young woman was sentenced to a fine of \$500 and three hours in jail. At the jail the young woman was received as a guest in the matron's room and sat chatting with her friends, while a watchful attendant eyed the clock to see that she was not forced to remain more than the stipulated 180 minutes. It is just such sentences as this that breed distrust in the efficacy and justice of the courts.

Suppose the colored boy had been the one who flew into an "ungovernable passion" and shot the girl. Would he have been treated in this fashion? If he had got off with three years' incarceration instead of three hours in jail, it would have been because the court had consideration for his extreme youth. The sentence was worse than a farce. It was one of those deliberate defeats of justice which create suspicion as to the integrity of the law and encourage further wrongdoing. As it stands to-day, any Washington young woman with a bad temper who sees fit to wreak vengeance upon a mischievous boy by killing him has the comforting prospect that she may do so at the expense of a few of her father's dollars and three hours' pleasant conversation in the spare best room of the jail.

The members of the American Anti-Tramp Society have a difficult task on their hands if they are to succeed in ridding the country of the tramp nuisance. The statistics of those who have made tramp life a study show that out of the whole number of men who make it a practice to wander from town to town subsisting on charity a great proportion have adopted their vocation as a permanent calling. They have become as thorough nomads as any Kypsiacs. In other words, there has been time and opportunity in the last two or three decades for the country to rear a tribe of men who form a distinct class organization and among whom there are certain codes and rules of conduct which are as firmly established as the rules governing the ordinary amenities of more civilized life. The tramp who subsists on cold "hand-outs" and rides on car trucks from city to city has a separate status from the tramp who makes a specialty of warm dinners and confines himself largely to the country and small towns. These professional vagabonds are tramps by choice and intention. Permanent work and wages with food and shelter are not what they want or will accept. The job which faces the tramp-removers is nothing less than the eradication of an entire large army of people who "work" at their own trade with an assiduity which bespeaks an intense liking for it. The fact that this army is not compact makes it all the more difficult to deal with. The anti-tramp society is right in thinking that the only remedy lies in a concerted action undertaken in common throughout the United States. Of the various experiments tried in Europe some have been reasonably successful, but there the system of police and military surveillance renders any plan much easier. Here the only remedy must be one that can be put in practice throughout the country. It is not to be hoped, either, that any satisfactory results are to be achieved without long-continued effort. One dose of compulsory work may drive a tramp out of a community, but it is not going to reform him. He must be made to understand from experience that there is no room for him and no chance for him anywhere unless he will work.

### Reed's Joke on Dingley.

Several years ago (says Moses P. Handy), Mr. Reed and Mr. Dingley attended a dinner given by Roswell P. Flower, who was then a member of Congress. Mr. Reed is not a drinking man, but takes a glass of wine when he feels like it. Mr. Dingley, a total abstainer, was on this occasion the only man at the table who eschewed the bottle. While conviviality was at its height, Mr. Dingley was called from the room for a moment. Mr. Reed noticed the absence of his colleague, and with great anxiety began looking under the table. "What is the matter, Reed?" said the host. "I was looking for Dingley," said Reed, with a perfectly straight face.

### In Japan.

Japanese auctions are said to be conducted in the following manner: Each bidder at an auction writes his name and bid on a slip of paper, which he puts in a box. When the bidding is over, the box is opened, and the goods declared the property of the highest bidder.

If men look as bad in their anger robes as they look in their night shirts, it will be the security of their throats that will make heaven attractive.