FARM, FIELD, GARDEN.

NEWS, NOTES AND EXPERIENCES IN FARM LIFE.

Wood for Fuel—The Relative Value of the Different Kinds—Varying Conditions of Wood According to Its Exposure and Treatment.

For those who cut wood on their own lands, but more especially those who purchase it by the cord, the relative value of the different kinds should be well understood. It is a common opinion that the hard and heavy woods are far more valuable than the light and softer kinds. This is true when they are purchased by the cord, but by the pound there is very little difference, explains Country Gentleman. Hickory, for example, which is about as heavy as water, has been found by careful experiment to give out in burning more than twice as much heat as pine, which is not half as heavy as hickory. Hard maple emits two-thirds the heat of hickory. But take pound for pound, then these woods vary but slightly in the quantity of heat.

More difference, however, exists in the condition of the wood, according to its exposure and treatment. Take the same wood, for instance, and let it be wet or water soaked or partly decayed, which would be as bad as possible for fuel purposes, or season it by fermentation of the sap, which would be somewhat better, corded up in a shaded place for drying; corded in open ground; sheltered under a roof for a year; kiln dried. Here are the several gradations of a scale, showing how freshly cut green wood may be subjected to different kinds of treatment, which taken between the best and worst would affect many times its value. Our gradation not included in this scale is the manner in which wood is piled when cut, by placing the bark on the sticks upward instead of carelessly at random; this care will turn the water of rain off, keeping the wood dry and holding the bark. Otherwise the water would run under the bark and cause decay.

The difference in the value of freshly cut green wood and that which is well seasoned should be understood by those who burn wood in dwellings. Hickory wood cut green and then made thoroughly dry has been found to lose 37 per cent. of its weight, and some lighter woods nearly one-half.

Another important point in connection with the use of wood for fuel is its economical consumption. A common simple brick "fireplace" with a strong draught wastes about nine-tenths of the heat, which is carried up the chimney. But this amount will vary with the shape in which the fire is built. If plenty of burning coals face the room much more heat will be radiated into the room than when they are concealed by large sticks in front of the fire. A slow draught will not sweep so much heat up the chimney as a rapid one. A fireplace partly cased with metal will radiate more heat into the room, and Mr. Dell found that an ordinary open parlor grate saved about one-fifth of the heat instead of only one-tenth. A sheet iron stove with stove pipe and one elbow lost only one-half.

A Cheap Ice House.

An Ohio farmer has the following to say about cheap ice houses: I have a very cheap but rough looking ice house that keeps ice as well as a more costly one. I first leveled off a space 10 feet square on gently sloping ground and laid down scantlings with loose boards on them for the bottom of the ice house. On one side posts were set in the ground, rising 10 feet above the surface. The opposite posts are 7 feet high, giving the board roof 3 feet of pitch. After a few of the first courses I put in the ice and nail on the siding at the same time. A space of 18 inches is left between the ice and the siding, which is filled with sawdust as the other work goes on. The floor is covered with sawdust, and 18 inches in depth of the same is thrown on top of the ice as a finish. A small opening is left in the gables for ventilation. A space 3 feet wide between two posts is filled with loose boards that can be taken out from top to bottom as the ice is wanted. A little sawdust is packed around the outside to prevent the air from circulating under the ice. In the uncertain winters we have I think it better to gather the first ice that is thick enough to keep, and not wait for it to get better, which sometimes results in not getting any.

Bone Dust as a Fertilizer.

Bone dust, like barn yard manures, does not immediately yield up its nitrogen and phosphoric acid to plants. The bone phosphate of lime is insoluble in water, and but very slightly soluble in water containing carbonic acid. The gelatine of the bones would seem decompose in a moist, porous, warm soil, provided it was not protected by the oil and by the hard matter of the bones, therefore by removing the oil reserves one of the hindrances of decomposition. Reducing the bones to fine powder is another means of increasing their availability.

Another good method of increasing the availability of bone dust is to mix it with barn yard manure and let both ferment together in a heap. The bone dust causes the heap of manure to ferment more readily, and the fermentation of the manure softens the bones. Both the manure and the bones are improved and rendered richer and more available by the process.

A Problem in Potato Culture.

Notes from The Rural New Yorker's experiment grounds give the results of the third season's experiments to solve the problem whether fertilizer should be placed under or over the seed pieces of potatoes, a problem that, it would seem, might well be worked upon by the stations. Thus far the question is not satisfactorily answered. The average is in favor of placing the fertilizer over the seed, as will be seen, is about ten bushels to the acre. The experiment will be continued.

The Burton Columbian Tower company has been incorporated at Spring Bell, Ills., to build a tower for the World's fair. It is proposed to make this structure 1492 feet high, a foot for every year of the Christian era previous to the discovery of America. Can the Yankee nation make some original work and not merely imitate a Pennsylvania and make a tower a few hundred feet higher than his? Let us have something new. Mows of the new third party?

HINTS TO POULTRYMEN.

Ventilating Poultry Houses Without Causing Draughts on the Fowls.

The first objects now with poultry keepers, and particularly with those who are making especially of egg production, are to secure warmth and afford pedestals from dampness to their fowls. Dampness and cold draughts of air in poultry houses are the most prolific causes of that dreaded disease, fowl cramp. Warmth is absolutely essential to egg laying, because only those hens that have comfortable houses to roost in lay during the winter season in Minnesota climates. The draughts that find their way through doors, windows and side cracks of poultry houses result in the loss of many chickens every season. The poultry house ought to be as nearly air tight as possible, and all fissures, especially about the floors and windows, closed on the approach of cold weather. The employment of tar paper as a lining to hen houses has been favorably reported upon by many, not only because this makes the house warmer, but the odor of the tar is in some measure a check upon vermin. Better still than the tar paper is tarred felting.

The question of ventilation is an important one and worthy of consideration. The ventilation gained, however, at the expense of warmth does more harm than good, and direct draughts on roosting fowls create more disease than no ventilation at all. Not a few poultry keepers make holes in one end of the house, and let the air get in and out the best way it can. Others build their houses with the boards a little apart in order to provide a current of air, and then wonder why there is no profit in poultry. Better far no ventilation of winter, except what is gained during the day by opening the doors and windows, than this reckless exposure of the fowls to draughts.

But, explains the agricultural editor of The New York World, authority for the foregoing, there is a happy medium between the two extremes of draught and no ventilation. One plan is to form a small chamber about midway between the eaves of the apex of the roof with boards, and then place at the end of this chamber a ventilating trap. By this means there will be a current through the ventilating chamber that will carry off the vitiated air without causing draughts in the house itself. Wright advises for the ordinary poultry house an opening at the highest part of the roof, surmounted by a "lantern" of boards put together in the well known fashion of Venetian blinds.

It must be borne in mind that the air of a poultry house does not become foul as quickly in cold as in hot weather, and therefore that much in the way of ventilation may be done by airing the house during the day, and employing some absorbent, such as dry soil, on the floor. It is wise to sprinkle the floor often with some good disinfectant. Land plaster is a ready absorbent of odors. Another cheap disinfectant is sulphate of copper, diluted in water.

Comb Foundation.

Prof. A. J. Cook, in his guide to bee keeping, has the following to say on comb foundation:

German thought and Yankee ingenuity have devised means for giving the bee a start in the important yet expensive work of comb building, and hence the origin of another great aid to the apiarist—comb foundation. For more than thirty years the Germans have used present sheets of wax as foundation for combs. In 1864 a Mr. Wagner secured a patent in this country on a foundation. He was also the first to suggest the idea of rollers. It was not until 1874, however, that Frederick Weiss, a German, invented a machine which brought the foundation into general use here. In 1878 Mr. A. I. Root bought the roller machine and foundation into general use. Since that time improvements have been made on the machines both by Mr. Root and others.

All of the improved machines give a foundation of exquisite guide, and with such rapidity that it can be made cheap and practicable. As Mr. Holden says, "The bees, in two days, with foundation, will do more than they would in eight days without." All who work extracts must use foundation often in the brood chamber and always in the section, unless nice white comb is at hand. Whoever has a hundred colonies of bees may well own a machine for himself, though it usually pays better to purchase the foundation. The process of making the foundation is very simple. Thin sheets of wax of the desired thickness are passed between the plates or passed between the rolls, which are made so as to stamp either drone or worker foundation as desired. Worker is best, I think, even for sections.

When to Sell Poultry.

It should be a rule never to sell a fowl until it is made very fat. A hen weighing six pounds should be made to weigh seven. The one pound extra is not much, but it adds two cents a pound to the price of the whole carcass. A six pound hen which would sell at 10 cents a pound, making 60 cents, if fatted and her wing seven pounds would bring 12 cents a pound, or 84 cents for the fowl. Here we see by making a fowl fat there is a clear addition of 11 cents to the total sum and 16 cents for the extra pound, equivalent to 48 per cent. gain by fattening the fowl.—Poultry Keeper.

Here and There.

New York state is credited with 2,000 cheese factories.

Arkansas has seven creameries.

Wisconsin has a large cranberry crop of good quality.

A large acreage of wheat has been sown for next year's crop.

Buyers have been driven west of the Mississippi for apples to supply the east this season.

Farm Journal is authority for the statement that a cottonseed factory and all needed machinery can be started now for $2,000, suitable for handling the output of 500 cows. For 300 cows $1,500 is enough.

Newspaper editors are tough old fellows. The clergy and the magazine writers have been abusing them hot and heavy for the last half century, yet they publish this alone in their journals with the utmost cheerfulness, and go and throw and get out larger and larger editions of their papers every year. They are an ever obliging.

In Ignatius Donnelly going to be the Moses of the new third party?

TRUTH AT A HIGH PREMIUM.

Eddie Abbott Herself Down His Father's Throat, but He Didn't Tell a Lie.

Little Eddie is a Brooklyn toddler. His great ambition is to be a man and wear a mustache. But he likes to play with matches. Of course his mother has often forbidden him to touch them, but he has often disobeyed her.

Until the other day, however, he had done no mischief. Then he learned a lesson that will probably linger in his memory as long as he lives. His mother had left the house to do some shopping and Eddie and his brother Cliffe were alone.

Scarcely had the mother closed the door behind her then Eddie proposed to start a bonfire in the back yard. This proposition was warmly seconded by Cliffe, and they soon gathered a heap of fuel.

As a high wind was blowing they thoughtfully placed these inflammable materials in advance forward by a high board fence, a two story frame extension of the house. In a few minutes the pile was lighted and the children were dancing around the blaze in high glee.

The fun was short lived. Soon the woodwork of the extension was ignited. At first it burned slowly, but none the less surely. The boys became frightened and ran for water; but while they were absent the flames entered a crack in the building, and when they returned they found a fire of large dimensions.

Realizing that he could do nothing Eddie ran upstairs to an upper room, where his father was writing. He coolly remarked, "Papa, I believe the house is on fire!" Papa quickly found that the child's diagnosis of the case was correct.

It required but little time to send out an alarm, and the firemen were soon at work on the burning structure with axes, hose and water. The fire was extinguished, but the building and most of its contents were wrecked.

One room in the extension had been made a store house for toys and other plaything, but those pups rescued from the flames at the risk of his life. But it was a serious table in clouds of blinding, suffocating smoke.

After it was all over there was an investigation. Little Eddie was the first witness.

"How did the house get on fire, Eddie?" asked papa.

"Why, papa," he said as his big, dark eyes filled with tears, "I is sorry, but I did it with my boodles."

For a moment papa wished he owned a horsewhip, but love and admiration for his truthful little man prevailed, and with a half stifled sob of joy he caught Eddie in his arms and kissed him.

"Yes," said papa afterward in telling the story, "I suppose you will say I ought to have whipped the little rascal, but the fact is, sir, I didn't have the heart. No amount of money could have induced me to have done so. Pshaw! Oh, yes; I sent Eddie and Cliffe to bed without their suppers, but after that my heart relented and I sent them each a slice of bread. No, I don't believe in encouraging such misdemeanors, but I do believe in placing a high premium on truth."—New York Herald.

Tricks for Dogs.

To "beg" or to "play dead," to "say his prayers," to "smoke," to "reach," are all easily learned by dogs. First show the dog what you want by putting him in the position you wish him to take, with the command which you use for the trick. Be sure always to use the same words for any trick. Do not say "Lie down!" one day and "Charge!" the next. If you begin with "charge" keep on with it.

You will do well to teach your dog to follow close behind you or, as it is called, to "heel." It will at times be a great help to you. It is easy to teach the dog associate the command "Heel!" with the act of walking close behind his master, but it requires a good deal of persistence on the trainer's part. It is a dog's nature to run and roam all about, and if he is allowed to "forget" once or twice he soon remembers themselfer.—Youth's Companion.

The Indian's Ideal.

Above wealth, wives, children and civil rangers there is one thing an Indian looks next to his God, and around his mind is emblazoned the fame of him who can fight and die. A soldier—that is the man whose image fills an Indian's eye. The love and the inborn ambition of all that was noble in the old days, and a little man in a fine uniform is the only thing good about the white people which an Indian ever saw. He represents courage, justice and truth, and while the civil agents and Indian Washington, to date not had and insufficient estimate to a conquered race may receive the homage, they can never command the respect of the red tribes.—F. Remington in Harper's Weekly.

Very Old Jokes.

Hierocles (Fifth century) wrote The Facetiae—twenty-eight stories of scholastic or bookworms, usually called simplicities. Here are two of them, from which you can see that some of the so called modern wit is as old as Hare also. A simpleton wishing to cross the river went on board the boat on horseback. When some one asked the reason he answered that he wanted to get over in a hurry.

A simpleton learning that the raven would live more than two hundred years bought one and brought it up that he might test the matter.—C. E. Bulbe in Boston Transcript.

An Explanation.

Clarinda—What detains Cousin Will so long in the vestibule?

Clarissa—He's rubbing his gums on the mat.

Clarinda—Good heavens! Why don't he use a toothbrush.

Clarissa—Well—I—Permit me to explain. The young man is cleaning his rubbers.—Pittsburg Bulletin.

DO YOU KNOW WHAT AILS YOU?

You feel tired—you you know what it means? You are nervous—Why? You cough in the morning—Do you realize the cause? Your appetite is poor—What make it so? You scent like a changed person to your friends—Do you know what is the matter, or has the change been so gradual it has escaped your notice?

You have Consumption! We do not say this to frighten you, but it is true. These are the sure symptoms of this terrible disease. There is one thing which will check it and that is

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THEY ALL INQUIRE FOR

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ENGINES, BOILERS, ELEVATORS, SAW MILLS, LOCOMOTIVES, STEAM MOTORS.

A Warning To Horse-Owners.

The Split Nail in this Shoe seriously lamed the horse from which it was recently taken in Worcester, Mass. One point of the nail came out in the proper place for clinching, and so deceived the blacksmith who shod the horse. The other point went in the direction shown in the illustration, piercing the tender part of the foot called the "quick," from which the horse was made lame for the nearly two weeks.

DANGEROUS

The Putnam Nail

CANNOT SPLIT, SLIVER OR BREAK.

It is the only Hot-Forged and Hammer-Pointed Horseshoe Nail in the World made by machinery, the same as by the manner as the old-fashioned hand-made nails.

The United States Government protects the process of their manufacture through patents, and other firms who make so advertise. Well as horse shoes are offered, are guilty of infringement and Deceiving the Public.

AS YOU VALUE YOUR HORSE insist on your Blacksmith using the PUTNAM. It is absolutely safe.

For sale by all dealers in Horseshoe Nails. Sample box by mail, 50 cents (for Paper.

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THE CRY OF MILLIONS

OH, MY BACK!

STOP IT NOW, SOON IT WILL BE TOO LATE

I have been troubled many years with disease of the kidneys and have tried many different remedies and have sought and spent much money in obtaining without relief. About the 19th of April I was suddenly seized with a very violent attack that almost prostrated me to such a degree that I was not able to walk. When I sat down it was almost impossible for me to get up again, or to get on my feet. White Kidney Protectors sold by Dealer, with the directions, stated that in