

THE FARM AND HOME.

RULES FOR MEASURING HAY IN STACKS OR MOWS.

Selling by Measurement—Portable Swine Pens—Water-Cress as a Commercial Product—Wind Power—Farm Notes and Home Hints.

How to Measure Hay.

In answer to a number of inquiries in the Orange Judd Farmer again publishes a few simple rules for determining the amount of hay in stack or mow, when it is not convenient to weigh it.

Sellers are disposed to insist that a cubo of seven feet is a ton. This is entirely too small and will not weigh out.

It depends on the kind of hay, whether timothy, alfalfa or prairie, on the character of the hay, whether fine or coarse, on the condition in which it was put in the stack, and particularly on the size, especially the depth of the stack or mow.

In a very large mow, well settled, 400 cubic feet of alfalfa or timothy may average a ton, but on top of the mow or in a small stack, it requires 500 to 512 cubic feet; sometimes even more.

It is not safe for the buyer to figure on less than 500 cubic feet; but in a well filled mow, in selling we would rather weigh than sell at that measurement.

To find the number of tons in a barn mow or hay shed multiply the length, depth and breadth together and divide by the number of cubic feet you think, considering the quality of hay and the condition in which it was put up, will make a ton.

To measure a cone-shaped stack, find the area of the base by multiplying the square of the circumference in feet by the decimal .07958 and multiply the product thus obtained by one-third of the height in feet, and then divide as before, cutting off five right hand figures.

The correctness of this will depend somewhat on the approximation of the stack to a regular cone, and if the stack bulges out it makes the product too small. The better way is to estimate the area of stack up to point of tapering in and apply above rule to cone shaped top.

The best way to weigh. The experience of weighing a few stacks will enable any one to judge quite accurately. Another approximate rule for measuring a round stack is this: Select a place which is near as possible to what the average size would be if the stack were of uniform diameter from the ground to the top point.

Measure around this to get the circumference. Add four eighths (.0000) to the circumference at the slight and divide the whole by 31.559 to get the diameter. Now multiply half of the diameter by half of the circumference and you have the feet of the circular area. Multiply by the number of feet the stack is high, and you will have the solid or cubic feet in the whole. Then divide by 500 to 512, according to its size and compactness and this will give the number of tons in the stack.

Portable Swine Pens.

George Wylie, a well-known swine breeder, says: portable swine pens. He correctly says that when the ground around the pen becomes foul by continued occupation, these pens are easily moved to a fresh location, and the ground previously occupied by them plowed up and a crop or two raised from it, thereby purifying the soil.

After two or three years it can be again seeded to grass and the pens returned to their original location. A rotation of hog pens once in two or three years goes farther in the direction of maintaining fertility than anything Mr. Wylie says he has ever tried.

With this kind of pen, or as many pens of this kind as may be necessary for the number of hogs kept, the original outlay for pens is reduced to a mere nothing in comparison with the large hog house. They will pay for themselves every year they are used.

With this system, less than half the labor will keep the pens clean; they are warmer, the air is purer, the young pigs are healthier, and large numbers at any season are prevented from piling up together.

At farrowing time each brood sow is isolated from the others, thereby being removed from anything liable to make them irritable and restless. The essentials to be secured are health, comfort, warmth and cleanliness and any outlay of money that goes beyond this must be regarded as about the same light as a prominent breeder regarded his expensive 30x60 hog house. Said he: "It's not much account for swine, but its awful nice to show to visitors."

Water-Cress as a Commercial Product.

Wild water-cress shipped from the western part of the state to Chicago has found such ready sale at fair rates that it is likely to be grown for market whenever conditions are favorable. An Illinois man tells the Ohio Farmer how he started.

I have had eight years' experience with a one-fourth acre cress pond and will write what I know about planting the seed. The seed should be a level patch of mud near a spring branch, where surface water will run over it.

Scatter the seed by gently pressing into the mud with the back of a spade. The seed must stick to the mud or the first little rain will wash it all down the creek.

Then allow just enough spring water to run over it to keep it cool and wet. It does not require running water, simply near a spring branch. Cross plants large enough to transplant can be grown as soon as you can grow cabbage plants.

To correct what the books say, I will notice that the plants should be set at the edge of running spring water, not in water eight inches deep. Clay is better than gravel. I have one gravel spot in my patch and it causes me lots of trouble; it leaks; I can't hold the water when I want it. I have two kinds of cress, "brown leafed" or black cress, as I call it, and the green leaf. No sale for black cress. The green leaf variety is the best, and I am working hard to get rid of black cress.

To write a full statement of planting, care and management of a cress pond would make a lengthy article. I sell about \$400 worth a year from my one-fourth acre. I find it a big job to take care of it in winter.

Using Wind Power.

Very light and some not very light jobs about the house and barn may be performed by wind power. In our boyhood a neighboring farmer's boys rigged up a good-sized windmill and used the power from it to turn the crank of a grindstone and to turn other cranks that worked the straight up and down dash churns.

In this way their ingenuity saved them labor that other boys as well as ourselves had to perform when we had other and to us pleasanter uses for our time. In Holland wind power is largely used. We think it is coming to be here, and especially when cheap means are devised for storing the wind power as electricity where it may be more available. More wind mills are finding a market now than ever before.—American Cultivator.

Farm Notes.

If sheep are to be sold they should be fattened.

A small nostril in sheep is said to show a lack of vigor.

It pays to keep the good ewes even if butchers do offer tempting prices.

Nothing is more important on the farm than to stack the hay properly.

Timothy hay is more nutritious and palatable if cut before getting quite ripe.

Aluminum horse shoes are gradually coming into use. They are light and durable.

The roots of corn will occupy the whole ground between the rows if they are not plowed off.

An experienced orchardist says that no orchard, whether young or old, should be allowed to grow heavy crops of grass every year to be taken off. Growing clover and feeding it off with pigs is a much better plan.

There are two sides to the matter of Western farmers burning corn for fuel. If coal and wood are scarce and high, and corn the cheaper fuel, why not burn it? There is no complaint that it is not a fuel, says a writer.

Some one has said that the observant fruit grower never has any heavy pruning to do. The growth of each tree is carefully noted, and any excessive freaks that the trees indicate as being started are literally nipped in the bud.

An exchange says that the best and easiest way to oil harness is to use crude petroleum. Put a little lamp-black in it and apply it without washing the leather. The oil will take the dirt off, and go into the leather keeping it soft.

To make butter separate from the cream, a dairyman says he adds a quart of water in which a teaspoonful of salt has been dissolved, to each four quarts of cream at 64 degrees, when the churning is ready to begin. He says it reduced the time of churning from three hours to twenty minutes.

Home Hints.

Rendered beef fat makes an excellent fire crust, used with butter.

Pour diluted carbolic acid at once upon every part of a poisonous wound; afterward give internal stimulants.

Chickens, Cucks, turkeys, geese and pigeons should have the heads taken off close to the bodies. The skin of the necks should be left long enough to turn down upon the backs for all such or two. When the bird is trussed its pliaons will keep the skin secure, or it may be fastened by a needle and thread.

The secret of scrambled eggs is not to beat them before cooking, to have a hot skillet, and to take them off while they are yet very soft; they cook a half minute after they are taken off, which many cooks do not allow for. A dash of lemon juice just as they are going to the table in a hot dish is an addition.

To keep gooseberries for tarts: When the weather is dry pick the gooseberries that are full grown but not ripe, remove the tops and tails, and put them into open-mouthed bottles; gently cork them with quite new corks, and set them into a warm oven; let them stand until shrunken a quarter part; then take them out of the oven and immediately beat the corks in tight; cut off the tops and cork them tightly down. Set in a dry place.

A solution of oxalic acid has been used for removing ink from cotton, linen or the fingers, but it is attended with the danger of injuring textiles and the skin. A much safer and better treatment of ink or rust stains consists of two parts of powdered cream of tartar and one part of finely powdered oxalic acid. Soak up the ingredients well together and apply the powder with a dry rag to the dampened stain. When the spot has disappeared the rag should be very well washed.

FACTS AND FANCIES.

The inhabitants of Eap island, in the Pacific, have pink hair.

A calf "having seven legs" is the latest monstrosity reported from New Brunswick, N. J.

A married couple at Raleigh, N. C., are aged ninety-nine and ninety-three years, respectively.

According to Canon Farrar about 4,000 clergymen of the church of England are out of employment.

Paris now gets its water supply from six great springs; it travels through eighty-three miles of aqueducts.

There are 173,000,000 Mohammedans in the world already and 400 missionaries are sent out from Cairo every year to make fresh converts.

Telephonometer is the new instrument that registers the time of each conversation at the telephone from the time of ringing up the exchange to the ringing off signal.

Miss Kate Levan of Bucks county, Pennsylvania, a girl of 16, drives the mail stage between Princeton and Fleetwood, and can manage a four-horse team with as much skill as any man in the county.

During the last Paraguayan war it was noticed that the men who had been without salt for three months, and who had been wounded, however slight, died of the wounds because they would not heal.

In Russian temperance societies the pledge is taken for one year. The first time a member breaks the pledge he receives nineteen with a birch rod, and with each succeeding offense the punishment is doubled.

The often repeated statement that all the old soldiers of the first French empire are dead is untrue, as the last military budget shows that eleven are still living. These eleven enjoy a pension of 250 francs each, and are the proud possessors of St. Helena medals.

Not far from Boston a well known merchant has a cemetery lot in which, side by side, rest two wives. On one headstone there is a touching lamentation, "My beloved Lily," and on the other, "My cherished Violet." He is now living happily with wife number three.

The Egyptians must have studied the art of distilling perfumes to perfection. Some of their ointment preserved in an alabaster vase in the museum at Alnwick is said to still retain a powerful aromatic odor, though it is believed to be between 2,000 and 3,000 years old.

Two hotel cars to be run from the East to Chicago, have been finished at Wilmington, Del., at a cost of \$20,000 each. They are new in design and unusually large. Each car has sixteen passenger compartments, fitted up after the fashion of the most luxurious hotel rooms. A space twenty-five feet long in the center of each car is occupied by a complete kitchen and beneath each kitchen is a large place for storage. Gas tanks supply fuel and light.

SAID BY SAGES.

To hate is the same thing as to kill. An evil thought is the mother of an evil act.

Youth looks at the possible, age at the probable.

Condemning other people will not justify us.

Don't go where you would not be willing to die.

Don't go to sleep until you can forgive everybody.

Don't neglect an opportunity to perform a kind action.

When you try to be good try to be good for something.

People who borrow trouble never have to go far to find it.

Don't go where you would not have your children to follow you.

There is no bigger coward than the man who is afraid to do rightly.

There is nothing easier to believe than a pleasing lie about ourselves.

Don't step over one duty to perform another. Take them as they come.

Don't forget that no matter where you are somebody is looking at you.

Conscience is the voice of the soul; the passions are the voice of the body.

Whatever sin has caused in the human race, it will cause in you if not given up.

The man who deprives his brother of a right is no better than the one who robs his house.

When the soul resolves to perform every duty, immediately it is conscious of the presence of God.

ANIMALS AND SNAKES.

Russia possesses at least one luxury in a breed of dogs which are said to be naturally quite unable to bark.

In Northern New York a man sat during a thunder-shower in a chain swine in a barn. Lightning ran down the chain and ripped the man's boots off without injuring him.

A Lodi, N. J. farmer, who had his horse stolen from him last month, recovered the animal by recognizing its neigh. When the farmer approached the horse, "it evinced the most frantic delight."

A tiny elephant, 3 years old, thirty-six inches high, 3 feet long and weighing 105 pounds, is on exhibition in Berlin. The dwarf phenomenon is from Sumatra. Its normal kin weighed at the same age from three to three and a half tons.

John Fowler, a workman near Waycross, Ga., was caught in a thunder storm. He rode up to a large tree and dismounted to take shelter. A rattlesnake coiled his rattle, frightened man and horse, who made a precipitate retreat. In five minutes the tree was shattered by a lightning stroke which would have proved fatal had Fowler remained under the tree.

AMERICAN STUDENTS ABROAD.

Hundreds of Young Men and Women at European Universities.

A recent statement from Berlin shows to what an increasing extent, in these days, young Americans, especially graduates of our colleges, after finishing their home education, go abroad to study, remarks a writer in the Youth's Companion.

At Berlin University alone, it is stated, there are 208 American students pursuing the regular university courses. Besides these there are many other young Americans in Berlin engaged in special studies, for which Germany's high state of advancement in science and the arts affords particular facilities.

Some are busy investigating Dr. Koch's supposed cure for consumption; some are studying music under eminent German masters; some are learning the German language; some are being taught painting, drawing and sculpture.

Our larger colleges—such as Harvard, Yale, Princeton, Cornell and Johns Hopkins—are most numerous represented; and there are more medical students among the Americans than students of any other branch.

Next come those who are studying philosophy and political science, history and physics. The fame of German professors in each branch of learning has attracted many of our young men, who desire to become eventually professors and teachers, and so study abroad with a view to obtaining special efficiency in the various departments.

At Berlin, moreover, there are many American divinity students who listen to the lectures of celebrated professors like Hoermack and Pfeiffer.

Most of the American musical students are young women who are finishing off their home musical education and intend to become either teachers or public singers or performers. The number of young Americans who attend the famous Berlin philharmonic concerts has been repeatedly remarked.

But, of course, Berlin is by no means the only European educational and art centre where young Americans congregate for instruction. There is a considerable colony of them at Heidelberg and also at Bonn, and a few are scattered at Gottingen and other German universities, each one of which is famous in some special field.

Paris, too, claims a large number of American scholars, who go to the "siren of cities" for three purposes especially—to learn art, music and medicine.

Scattered through the Paris schools and "pensions, are to be found very many American girls, who have gone thither to learn the "language of courtesans," and to receive the polish which is supposed to finish off a young girl's education, and to impart to her exceptional grace and good manners.

At Dresden and Munich, at Florence and Rome are gathered many young Americans, attracted by the musical advantages and art treasures of those historic cities. It would be interesting if a census could be taken of all the American young people who are now engaged in learning something in Europe. Probably it would be found that they number several thousand.

It is gratifying at least to learn, from the Berlin statement referred to, that American students of every branch are greatly respected by the instructors for their earnestness and industry.

There are doubtless many advantages to young Americans in thus pursuing a larger education at the ancient centres of learning in Europe. But in the case of our young girls who go abroad to study, at least every care should be taken by their friends that they are placed among good influences and surroundings while they sojourn in foreign cities.

PECULIAR SERVANTS.

John Had His Own Ideas of Appropriate Food for Different Sexes.

It is a well-known fact that Chinamen make excellent house servants, but they also have certain peculiarities which are a little odd at first to Americans brought up in the Eastern section of the country.

An Eastern lady, now living in California, tells the following story of her first experience with one of the Mongolians, illustrating their great powers of imitation.

She started one day to show the new servant how to make a cake. She told him to watch her make one and then to make the others like it. In preparing the eggs she broke two in a cup, and the third not suiting her she threw it out at the window. When John's turn came to the letter, if not the spirit of his instructions, he broke two eggs in a cup and threw a third out at the window.

One day the lady's husband had occasion to reprimand his servant very sharply. John got sulky, and when later in the day his mistress told him to kill a chicken for dinner, she heard him mutter to himself, "Me kill chicken for mistress, but me kill pup for master."

It so happened that the lady owned several handsome puppies, and feared the almost-eyed heathen would carry out his threat. She would not allow her husband to eat his dinner until she had assured herself that none were missing.—Boston Traveler.

The Chicago Way.

The Fair Visitor (hesitatingly)—If you please, here's a little notice I wish inserted.

The Society Editor—Certainly, madam; let me have it.

The Fair Visitor (reads)—The seventh engagement of Mrs. Smith Jones-Brown-Flourish-Richards, nee Quill-small, is announced. The favored seventh is Mr. Percy Wuncumore of Wabash avenue.—Pittsburg Bulletin.

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BALD HEADS What is the condition of yours? Is your hair dry, harsh, brittle? Does it split at the ends? Has it a lifeless appearance? Does it fall out when combed or brushed? Is it full of dandruff? Does your scalp itch? Is it dry or in a heated condition? If these are some of your symptoms be warned in time or you will become bald.

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