

FARM AND GARDEN NOTES

ITEMS OF TIMELY INTEREST TO THE FARMERS

Treatise on the Chinch Bug—New Points in Fertilizing the Peach—Hints About Horses—Making Butter.

TREES BLOSSOM BUT ARE BARREN.

Unless the flowers of any plant or tree are fertilized by the pollen of some other tree or by its own, there will be no fruit. In the case of some cherries and plums and equally with other fruits, it is often necessary to grow some distinct kind near another that the blossoms may be fertilized. In this case some other kind of cherry should be planted near the barren ones. When the young cherries wither and dry up or drop off, it is doubtless due to the attacks of the curculio or some other insect, which stings the fruit and lays its eggs in it, by which it is killed.—*New York Times*.

CHEAP FARM WATER TANK.

To make a cheap water tank, take three or more iron hooped barrels; saw each barrel in two above the center, with the exception of one, which must be about four inches higher than the rest. Now fasten them all to a wide plank with a 2x4, notched and bolted on each side to solidify them. Pump into the highest one, and as they are connected with each other by a short piece of pipe, they will all fill equally. It would make them better to tar them inside.—*Rural World*.

FOR BEANS AND PEAS.

If the soil is rich in readily available nitrogen, the probability is that a crop of beans and peas would gather but little of that element from the air, but would use what was already at hand in the soil. If the soil is very poor in nitrogen, it may be expected that these plants will gather their supply largely from other sources than the combined nitrogen of the soil. In general it would appear to be rational to apply no nitrogenous fertilizers to these crops, but to supply an abundance of both potash and phosphoric acid.—E. H. Jenkins, Connecticut Experiment Station.

HINTS ABOUT HORSES.

In cleaning them, if they will not stand the currycomb well, get a five or ten cent brush made of broom corn, used for scrubbing in the house; they are very stiff, writes J. W. Palmer. If horses are troubled with the scratches, mix two parts lard and one part gunpowder thoroughly, and apply on the place affected; it is cheap and effective. So manage your stable as to save all of the urine, as it is very valuable; have cement floors if possible. Do not hang harness in stable if you can avoid it. Do not feed too much hay, and avoid watering immediately after feeding a horse much of a dinner. If you have whole rye, you can feed a little, and save expense and trouble of grinding it, to young horses only. Use good snap lines and side straps at least, and by so doing save time, which is money on a farm. Farmers need to be cautioned about watering horses when heated.

MEASURING HAY.

The principle on which stacks or mows of hay are measured for weight is that the weight of one cubic foot of hay multiplied by the number of cubic feet in the stack to be measured will give the total weight. There are so many shapes of stacks that rules for all cannot be given, but knowing how to measure any kind of stack by the rules of arithmetic, the cubic feet contained in it divided by the number of cubic feet in a ton will of course give the figures desired. Timothy hay and clover in a barn mow or a stack well setted requires 600 feet for a ton, clear timothy 450 feet, common mixed meadow hay 500 feet, all clover 800 feet. Of course these estimates are only approximate; the guesser must consider whatever variation there may be in the kind of hay, whether it is coarse and heavy or fine and light, or green or ripe. Experience is easily gained by estimating a few stacks and weighing them. The rules for finding the number of cubic feet in any solid body will be found in any good school arithmetic or mechanics' guide to mensuration.

TREATISE ON THE CHINCH BUG.

Bulletin 63, of Ohio Station, just issued, is an exhaustive treatise on the chinch bug. The farmers of that state are warned that many of last year's second brood have survived the winter, and are now laying eggs. If May and June are dry, the pest may become serious. Each female lays about 500 eggs, usually depositing them at the surface of the ground on stems of grass and grain, and in rare cases on other plants. Burning such harbors will destroy millions. The first brood appears in May or June, the second in July or August, according to latitude—the farther north the later. The second brood lives through the winter, if not exposed to exceedingly severe weather. The young are red, but grow darker, the mature bug being black and having wings. The station distributed 700 packages of diseased bugs to 37 counties last season, and has kept a supply which is now increasing, and will be prepared to supply all demands from Ohio. There are indications that the disease disseminated last year survived the winter along with the bugs in the

open fields, and if so this will materially aid the farmers. Heavy rains are not only fatal to young bugs, but moist weather favors the spread of the disease among them. Plowing and ditching ahead of the advancing column, and spraying the bugs with kerosene emulsion are effective means of warfare. This insect never troubles rough broken countries, but confines its ravages to level plains.—Home and Farm.

MAKING BUTTER.

The farmer that is isolated from markets and is obliged to barter his butter at the store for eight or ten cents a pound will never get wealthy, and the best thing he can do is to join with his neighbors and try to induce some one to put in a creamery. The cow worth from \$50 to \$75 and given \$30 worth of feed in a year, if judiciously handled, one dairyman says, near a good market will make a profit for her owner. She should produce 6,000 pounds of 4 to 4 and one-half per cent milk, which, sold to a creamery at the average price of 80 cents a hundred, would return \$48 to \$54 a year. Besides there would be the skim milk, the calf and the manure. Twenty dollars to \$25 is considered a good profit on a cow after paying for feed and labor, saying nothing about the by-products. The cow that produces 30 pounds of butter a year will do so at a cost of ten cents a pound, if she is well managed. The average cost, however, is about 12 cents a pound, based on the price of feeds from year to year. The cow that produces only 200 pounds a year would do so at a cost of 15 cents a pound, and the 150 pounds a year cow at a cost of 20 cents, taking it for granted that the feed is the same in either case. The solution of this question is, maximum quantity at minimum cost, or, in other words, make the cow produce the greatest amount possible at the least possible expense.

A POINT FOR THE RENTER.

If any man should be a good farmer that man should be the one who rents land upon which to make his home and grow crops. He does not like to move from place to place any oftener than is necessary. It is not profitable to do this. Every intelligent farmer understands how necessary it is in order to get the most profit out of the acres of a farm that there be some system observed throughout a series of years in the matter of crop rotation, hauling out manures, keeping up farm repairs, and a hundred odds and ends that go unlooked after when the renter expects to stay on the place but for one year. As the country grows older it is likely that this better policy will hold in these matters in the interest alike of the owner of the land and of the man who is working it.

The point uppermost in mind in this connection is this: Farmers everywhere complain, often justly, of high rents and of the exactions of landlords etc., but then the landlord complains loudly also of tax-collectors, and of small returns upon his investment, and all this sort of thing; and now here is the point for the renter of lands—farm fewer acres, half the number if you please, and double the yield. If you can pay cash rent and are a good farmer pay it and get the full benefits of your superior methods, but if you cannot pay cash, farm fewer acres any way and make the yield large and your landlord will beg you to stay. As suggested at the outset the renter should be the best farmer in his neighborhood. There is scarcely such a thing as a limit to the possibilities of production within the reach of the man who gives his whole time and skill to a reasonable number of acres.—*New York Tribune*.

NEW POINTS IN FERTILIZING THE PEACH.

When peach trees are set eighteen feet apart each way, as is the practice in most northern states, there are 130 trees to the acre. An average of three bushels per tree for orchards five years planted, is considered a good crop. Analyses by Winton and Ogden, Connecticut experiment station, report '95 show that in such a peach crop of 190 bushels, there is contained, of nitrogen 19.7 pounds, potash 21.9, soda 1.2, lime 1, magnesia 1, oxide of iron 0.1, phosphoric acid 4.2, sulphuric acid 1 and chlorine 0.4 pounds. Jenkins adds that, contrary to the commonly received idea, the pulp of the fruit contains the greater part of both the nitrogen and mineral matters. Only about one-fourth of the nitrogen and one-tenth of the ash elements are contained in the stones.

In a paper on fertilizing orchards, Dr. Johnson shows that the wood of healthy peach twigs of one year's growth, from the orchard of the late P. M. Augur, contained 1.87 per cent of ash, of which 54 per cent was lime, magnesia 9 per cent, potash 16, phosphoric acid 4, and sulphuric acid 7 per cent.

It will thus be seen that both tree and fruit require liberal quantities of ash elements, especially lime. The mature leaves of oak and chestnut trees contain, with about 30 per cent of water, 3 to 4 per cent of ash, and of the latter, 30 to 40 per cent is lime.

"Where the water of wells or springs coming from the soil is soft or but slightly hard, the orchard needs lime to be supplied. This substance dissolves rather freely in the drainage water and is therefore subject to constant waste. In case of soil found in a number of states the natural supply of lime comes from rocks (boulders, gravel, sand and rock-dust) which contain but little and yield it up very slowly. For these reasons wood ashes or cheap lime should be broadcast at the rate of some 500 pounds per acre, yearly. If, as is becoming more common, scarlet clover or other legume is

sown to gather nitrogen, this dressing of lime and a liberal use of potash salts will probably be essential to the highest success."

ONE WAY TO MAKE A LAWN.

Leaving the old house behind, one of the first to dot the prairies in the late forties, means leaving the yard in this case, as our present habitation is a few rods from the old one, writes L. C. Greene. The new location was well sodded with bluegrass, but the lay of the land in its natural state was scarce suitable to the artificial make-up about a completed dwelling, so no sign was put up, "Keep off the grass." When moving the dirt from the cellar it was put where it would arrange the yard in the best manner. Soon as the wall was completed the dirt was graded up around it in good shape. A few days previous to this a heavy shower washed dirt out of a cornfield into the roadside—twenty tons or more—about ten rods distant. We drew off this dirt and covered the new dirt to a depth of four inches, then sowed winter wheat and red clover on it. That was done in July. They made an excellent growth. Did not allow any blocks or pieces of brick or mortar to be scattered about or tramped into the ground. It happened to be dry while doing the outside work. The ground was not tramped, so the wheat and clover grew close up to the wall.

In December the yard was covered with clover halm, which was never taken off. The wheat and clover wintered nicely. When the wheat was about sixteen inches high, or just before the heads came out, I mowed it rather high. It will grow up again; will probably get three growths of this kind from it, while it is giving the clover an excellent chance, which is better than getting a crop of wheat ripen and seeing the dead stubble the rest of the season. Then it will not do to cut too closely, or everything would be dead before September. You see what I am after is to get that ground filled full of clover roots, then about November will sow white clover; then mulch with ducgrass hay cut when the seed is ripe. This will not be taken off. Then another year let the red clover have growth enough to shade the bluegrass and white clover a little, and I think here will be a sod established that will last for some time to come.

Paper Dishes.

Machinery for shaping plates, dishes and other ware from paper pulp has been introduced in this country and Germany with fair results, says the Paper Trade Journal. The dishes are shaped almost entirely by compression; heavy plungers, fitted with correctly shaped flanges, are forced upon flat sheets of the pulp, and the outer rim of each flange being fitted with cutting devices, a plate is cut, shaped, compressed and made ready for baking at one operation. A new feature, which has not as yet been heralded, owing to its recent perfection, is a process of plating the dishes to imitate china, silver, etc. The aim of the new process is to enamel or plate the paper pulp dishes with a substance as effective as the best used in crockery manufacture, and at the same time very inexpensive. This substance is procured from waste silk. Defective cocoons, cocoons containing a double end, waste made in winding, waste procured from the silk factory, floor sweepings from the silk mill, and in fact anything pertaining to silky wastes are utilized. The waste is gathered, dried, cut up, ground and then dissolved. The field for its use has been very limited, and it is consequently a cheap substance. Sometimes two or more baths are needed to effect a good coating of the silken material. After the plates have received the enameling, the usual finishing processes of tableware follow, thus completing the goods for the market.

The importation of American horses into France is becoming a success that is not only stimulating to the national love for the honest penny, but to patriotic pride as well. The French will not yet acknowledge that our product equals their finest breeds, the Percherons, for instance, as carriage horses, draught animals and perhaps for cavalry use they regard them as far superior to the corresponding class of horses bred in France. The French breeders are taking fright, and we may perhaps expect to see some sort of a contract-labor-alien-horse law passed by the French Parliament.

Lepers are not so uncommon in Europe as is generally thought. One was picked up in the Paris streets recently and sent to the St. Louis Hospital, where there were already six other patients with the same disease. There are isolated cases dotted all over France, while the lepers' hospital at San Remo and in Spain and Portugal are never without patients. They are gaining ground in Turkey and the Ionian Islands. Crete has 500 of them. They are most numerous, however, in Norway, where there are 800, and are rapidly increasing in Sweden, which has already 402. In British India there are 100,000 lepers. The disease infests Indo-China, Tonquin, China and Japan, as well as Hayti, Trinidad, Guiana, Venezuela, Brazil and Paraguay.

"One of the most remarkable new departures in the freight business," said Mr. Omar H. Bartlett, general freight agent of the Louisville and Nashville Railroad, "is the idea of icing vegetables for shipping long distances. It has been tried spasmodically in other years, but never until this year was the plan carried out to any extent. Now the New Orleans shippers are icing their vegetables right along. We have already this season hauled twenty-five cars to New York city alone that contained live vegetables, and the shipments to Boston, Buffalo, Pittsburgh, Baltimore, Philadelphia and, in fact, to all the Northern cities, have followed out this new idea. You know, the shipment of cucumbers, cabbages, beans and all kinds of garden stuff have grown very rapidly in the past few years, and now the producers have found it necessary to ice them. The process of packing is quite interesting."—*New Orleans Times-Democrat*.

The Railroad Gazette says: "The records of the new railroad building in the United States in 1896, which have been gathered, show that 717 miles of road has been built in the first half of the year. The total is not very different from the amount of railroad which has been constructed in the first half of any year, since the conditions in 1893 called a sharp halt in railroad building. Last year 622 miles of new road was built up to July 1, and the record is 1894, only 495 miles between January 1 and July 1, showed how decisively extension work had been stopped. It will be seen how greatly railroad extension has been checked by the conditions of the last few years, and there are no substantial signs that any large relative increase is to be expected."

An Epileptic Colony.

A home for twenty women has been added to the epileptic colony at Chalfont, England, where thirty-six now have been employed for the last two years in market gardening, carpentering, and shoemaking. Their general condition has improved, and the doctors think the treatment has had beneficial effects even on the epileptic fits.

Gold has been found in Chen Chow, China.

NOTES AND COMMENTS.

The timber wealth of the United States gives a yearly product of over a billion dollars, or more than twice the value of the entire output of all the mines. Yet nowhere on earth is the wealth of the forests wasted more wantonly than in this country.

In a recent address in New York, E. Francis Hyde declared that the 318 square miles of area of Greater New York was sufficient to accommodate standing room to all the inhabitants of the earth, 1,450,000,000 in number, and allow six square feet to each individual.

French authors will henceforth have power to have the looks of their publications examined in order to ascertain whether they have been paid their royalty in full. A decision has just been rendered in the case of Paul Bourget versus Lemire. Lemire objected to an inscription of his books, and this was the cause of the suit.

Electric railways have displaced in the United States no less than 275,000 horses, says the Pittsburgh Dispatch. So many horses would require about 125,000 bushels of grain a day to feed them, amounting to 45,000,000 bushels a year. The loss of the commercial demand for this grain in the cities where these railways run mean an enormous loss of transportation tonnage for the railways—some 62,500 carloads. Here is a question of domestic economy that is serious.

Hair-splitting on a legal technicality this time in Minnesota. The crime at this time in Minnesota. The crime was forged, and the indictment charged the defendant with having fraudulently and feloniously uttered and disposed of a forged instrument, then knowing the same to be forged. That would appear to be the lay mind to be sufficiently definite. But it happens that the statute, in defining forgery, makes the crime to be the uttering of a forged document "as true." The words "as true" were omitted from the indictment, and this, in the opinion of the Supreme Court, was a fatal defect.

Dr. Toner, the venerable historian, who knows more than any one else about the private life of Washington, for he has made it a special study for half a century, says that the recently-published story about a woman at Williamsburg, Va., being jilted by the Father of His Country is untrue. Washington had many love affairs, but he never jilted any woman. He was sentimental and susceptible, fell in love with a number of girls, and offered himself to several before he captured the pretty Widow Custis. But he was not a heart-breaker, and in all his relations with woman was sincere and honorable.

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It is noted that since the extensive planting of eucalyptus trees in southern California there have been no droughts.

Labor in South Africa

The English carpenter has a "boy" to carry his tools for him; the English bricklayer has a native hodman to hand the bricks to him, which he proceeds to set. Work requiring skill is very often done by whites, because they do it much better, but white labor leans on and uses black labor. So on the railroads the stationmasters and guards are white, but the heavy jobs which need little skill fall to the blacks; so field-hands and those who actually herd the cattle are natives, though there are usually whites over them in a position of authority.

In all new countries skilled labor is dear, but in South Africa it is exceptionally dear, because the skilled white man insists on having blacks beneath him, and black labor, though it is cheap if measured by the price paid for it, is really dear if measured by what it accomplishes; for it is unskilled and uncertain, the native, except in a few of the older parts of the country, not yet having acquired the habit of steady and patient industry which makes labor effective. It is of course in the newest districts, where the natives are still raw and scarcely removed from a savage state, that this uncertainty is most felt.

In the gold fields of the Transvaal and Mashonaland the supply of native work people often falls short, although at Johannesburg a native can earn three pounds (\$15) month besides his food and such lodging as he needs. The development of the mines is, of course, to some extent retarded by this difficulty of obtaining a permanent supply of labor.—*Century*.

Unreal Life of Kings.

This young man—the Kaiser Wilhelm—from all I have observed since he became my neighbor in Venice writes Mr. Zangwill in Astor's magazine lives a highly colored dramatic existence, in which there are sixty minutes to every hour and sixty seconds to every minute, the sort of life that should have pleased Walter Pater. He must be a disciple of Nietzsche, a lover of the strong and the splendid, this German gentleman, who is just off to Vienna to prance at the head of 1,500 horsemen. While he lived opposite me it was all excursions and alarms. As a neighbor an emperor is distinctly noisy.

And yet, 'tis a strange life, a king's. What an unreal universe of flags and cannons and phrases must monarchs inhabit. Do they think that the streets are always gay with streamers and bunting and triumphal arches, always thunderous with threats of men or guns, always impassable? Do they imagine their subjects pass all their lives in packed black masses, waving hats? Poor kings! I always class them with novelists for ignorance of real life. And to think that they can only get to know life from novels!

Mica.

The commercial micas are: Mus