SOUTHERN ✣ FARM ✣ NOTES.

TOPICS OF INTEREST TO THE PLANTER, STOCKMAN AND TRUCK GROWER.

Fertilizing the Crop.

The primary object in using fertilizer is to produce a larger yield of the crop that is to be immediately grown, or is already growing, on the land to which the fertilizer is to be applied. As a rule, it contains from ten to sixteen per cent. of more or less promptly available plant food. In other words, a commercial fertilizer contains in every 100 pounds weight from ten to sixteen pounds of available phosphoric acid, either alone, or that amount of phosphoric acid and potash combined, or of these two and nitrogen combined, making in the latter case what is called a "complete" fertilizer. Now this ten to sixteen pounds in each 100 pounds of the fertilizer is supposed to be, and should be, practically soluble and available at once, or within a week or two, for the use of the crop, says Virginia-Carolina Fertilizer Almanac.

The remaining portion of the fertilizer, or eighty-four to ninety pounds in each 100 pounds, is a mixture of insoluble phosphate and sulphate of lime, some sand, water, organic matter and other things that are necessarily incident to the manufacture and cannot be economically removed. They are of very little immediate value to either the crop or the soil.

So when we apply a high grade fertilizer to the soil the object is to supply the plants with solable plant food and increase the yield of the cotton, grain, grass or whatever the crop may be.

Incidentally, however, this fertilizer does help the land, because it induces a larger growth of stalk, roots and foliage of the plants—or those parts that will be returned to and become part of the soil. A dose of this fertilizer, for instance, not only increases the size of the stalks, the foliage, hulls and other parts that go immediately back and form a part of the soil in the shape of humus (decayed vegetable matters). But the principal way to improve the soil itself is to add vegetable matter to it in the form of stable manure, renovating crops, rotation of crops, etc., in a more direct manner.

It would seem manifest, then, if we wish to increase the yield of corn, cotton, wheat, oats, grass, etc., that the fertilizer should contain the three "elements" of plant food in the proportions that are best suited to the particular crop. This is particularly true if the purpose is to use liberal amounts of fertilizer per acre. In such case the deficient supply, in the natural soil, of any one or more of the three "valuable" elements (phosphoric acid, nitrogen and potash) need not be specially considered.

According to carefully conducted field experiments, conducted at many of the experiment stations, it has been found that cotton requires a fertilizer that contains about one part each of nitrogen and potash and 3 1-3 parts of available phosphoric acid. This demand would be met by a fertilizer containing ten per cent. available phosphoric acid, three per cent. of nitrogen and three per cent. of potash; or, as ordinarily expressed, a 10—3—3 fertilizer. One analyzing 9—2.70—1.70; or 8—2.40—2.40; or 7—2.10—2.10, etc., would answer just as well, provided these lower grades be applied in heavier quantities.

So it has been found that corn, sugarcane, sorghum, grasses and other crops belonging to the grass family respond best to a fertilizer that shall contain ten parts of phosphoric acid, five parts of nitrogen and two parts of potash—or a 10—5—2 fertilizer. The following formulas are in precisely the same proportions, only they are of lower grade, and would give practically the same results only when a correspondingly larger application shall be made per acre—viz., 9—4.50—1.80; or 8—4.00—1.60; or 7—3.50—1.40, and so on. Of course, these lower grades can be sold at lower prices than the high grades, but, as a rule, the farmer will find it more economical to buy the high grades, both on account of their cheaper price per "unit" and also the saving of freight, the latter being precisely the safe, per ton, for both high and low grades.

Value of a Cow.

In undertaking to place an estimate on the value of a cow the exact amount of milk and butter fat produced should be determined.

Most people when estimating the value of a cow will be largely influenced by the statements made by the owner of the number of gallons of milk she will produce. This information is usually very misleading, as most persons do not take into consideration the foam in milk, and again, the party wishing to sell a cow will sometimes exaggerate as to her production as well.

The milk from a cow as not measured, should not be given any consideration, but to know the exact amount of milk a cow gives it should be weighed with an accurate scale; foam adds nothing to the weight of milk. When the milk from a cow is weighed morning and evening, then her daily production can be estimated, but it is better to know the weight of milk produced for a number of consecutive milkings and to take an average of these for determining her daily production.

After determining the amount of milk produced per day in pounds and ounces, then one should know the average butter fat contained therein. This can be determined by taking a sample from each milking, and form about five consecutive milkings, putting these samples together and determining the per cent. of butter fat in this composite sample. This will be an average per cent. of fat for the time during which the samples were taken. From the average daily production of milk and the average per cent. of fat the average amount of fat produced daily can be ascertained. As six pounds of butter fat thus determined will make about seven pounds of butter, the value of the milk for butter-making purposes can be determined. As butter fat is the foundation of cream, the value of the milk put into cream can be estimated. While this method does not give any idea of the amount of milk and butter fat a cow will produce during her milking period, it does show how much she is producing in butter or cream for the time being.

No dairyman should be without this record of each one of his cows at any time. It will enable him to know when a cow is not producing an amount which justifies her keep, and she can then be replaced with a better cow. Where records are kept as has been suggested at the end of the milking period the amount of milk and the amount of butter fat from each cow can be estimated and her value for that period pretty closely determined.—Wm. D. Saunders, Dairyman Virginia Agricultural Experiment Station, Blacksburg.

How a Tin Can Will Help.

Many different receptacles may be used in which to grow plants so as to have them of good size before putting them out in the field. Flower pots, paper pots, tomato cans, split wood boxes and paper bags are perhaps the most important. Of these, paper pots, tin cans and split wood boxes are best, though for a few plants paper bags of two-pound size, made of heavy glazed paper, answer well. Cut them to four inches in height, fill with three inches of soil and plant seeds in them.

The cylinders made from old tin cans or from tin secured from the tinsmith, are excellent. If made from old tomato or corn cans, the cans should be placed in a fire and heated just enough to cause the tops and bottoms to drop off. The seam can be melted apart, too, but it takes a little too much heat, enough to seriously injure the quality of the tin, so it is best to open them by cutting them from top to bottom. Then wrap a bit of wire around them to hold them in place, or bend the edges with a stove-pipe joint so they will catch and hold in the form of a cylinder, no bottom and of course no top. Set these on a board in a frame or kitchen, or somewhere where it is warm, fill with good soil and plant seeds of tomatoes, egg-plant and peppers, cucumbers, melons, cantaloupes and squashes for the early crop. When the plants are well grown and the weather is right, transplant by scooping out a hole deep enough to receive the can, set the can in place, unlock the joint or slip the wire off and there stands the plant in its ball of earth. Draw the earth up about it, and that plant will never know it has changed its quarters.—H. Harold Hume, in the Progressive Farmer.

What the South Needs.

The great need for the development of the agricultural resources of the South is not immigrants, as some seem to think, but it is the inculcation of right ideas and correct principles of agriculture into the minds and practices of the people we already have, and nothing will enforce them so much as the scarcity of labor. We certainly don't need labor to enable us to make more cotton. The fear that we will make too much cotton has become as a nightmare to the cotton farmer already.

But we have not started to write about immigration. We want to talk about farming, and we mean farming—not merely cropping or robbing the land; and if we can help some struggling farmer to get out of the ruts and get on the smooth track, the purpose of this article will be accomplished.—Progressive Farmer.

TAX FORTUNES, SAYS CARNEGIE.

Predicts Day When to Make Money Will Be Deemed Ignoble.

The London Review of Reviews prints a striking article by Andrew Carnegie entitled "My Partners, the People." Mr. Carnegie expresses the belief that a millionaire ought to share his wealth with the poor, but with the limitation that his fortune should not be divided before the millionaire's death. Then the community should exact a large share, graduated in increasing proportion to the extent of the dead man's wealth.

After advocating the British graduated death duties as a basis for distribution, Mr. Carnegie says:

"Such contributions from the owners of enormous fortunes at their death would do much to reconcile dissatisfied but fair minded people to the alarmingly unequal distribution of wealth arising from the new industrial conditions of our day. We shall ultimately have to consider the adoption of some such scheme as a progressive tax on all fortunes beyond a certain amount, either given in life or bequeathed at death, so that it will be impossible for the owners of enormous fortunes to hand no more than a certain amount to any individual."

Mr. Carnegie humbly deprecates the claim of the merely wealthy to fame. They have no place with educated men, and they occupy a lower plane intellectually. In the coming day brains will stand above dollars, and conduct above both. The making of money as an aim will then be rated as an ignoble ambition.

WISE WORDS.

Think not that thy word and thine alone must be right.—Socrates.

Many a good man's purse is like a siphon, the very emptying of which insures its refilling. — Arthur Edwards.

Our grand business is not to see what lies dimly in the distance, but to do what lies clearly at hand.—Carlyle.

Courage is a sort of armor to the mind, and keeps an unwelcome impression from driving too deep into perception.—Elmes.

It is only an error in judgment to make a mistake, but it shows infirmity of character to adhere to it when discovered.—Bovee.

To be truly happy is a question of how we begin, and not of how we end; of what we want, and not of what we have.—Stevenson.

Let a man learn that everything in nature, even motes and feathers, goes by law and not by luck, and that what he sows he reaps.—Emerson.

Joy is a working thing. It builds up while it enlarges the whole nature. It is the wine to strengthen the heart, to brace it to carry noble enterprise.—Dora Greenwall.

Shall a mechanical experiment succeed infallibly, and the one vital experiment of humanity remain a chance? Is corn to grow by method and character by caprice?—Henry Drummond.

Too many strictures as to childish conduct are like elastic garters seen too often on stout little legs. They impede the moral circulation, and should be for the most part laid aside. Elizabeth Grinnell.

If your faith in God is stronger for every humble task in which you need and get His aid, then that humble task is necessary to the fulness of your faith in God. It will make the music of your life more firm and solid.—Phillips Brooks.

We often do more good by our sympathy than by our labors, and render to the world a more lasting service by absence of jealousy and recognition of merit than we could ever render by the straining efforts of personal ambition.—Archdeacon Farrar.

God's thoughts are not as our thoughts. Dear as our happiness is to Him, there is something within us which is more precious in His sight. It is of far less consequence, in any divine estimate of things, how much a man suffers than what the man is. —Austin Phelps.

A Tale of British Adulteration.

Edward Connor, writing for the Practical Confectioner and Baker of London, states that among colorings used in candy manufacture in Great Britain reds are the most popular, yellows are second in favor, and browns, blues and greens of lesser esteem. He states that in France the reds allowed by law for this purpose are cochineal, madder and Brazil wood; of yellows, tumeric, fustic, French berries, Persian berries and saffron. Mr. Connor states that a considerable proportion of the white candies are doctored with sulphate of lime, flour, terra alba, plaster of Paris and etherial salts. Prussic acid, contained in the essence of bitter almonds, is also said to be largely in use. The fact that a leading trade journal of the Empire gives room to the article in question is warrant for the supposition that it holds some truth. Possibly there is a field for reform across the water.

OF INTEREST TO WOMEN

NEW COLORS.

Speaking of cloths suggests comment on the prevailing colors. Though they prevail temporarily, let it be said that they are not definitely established in favor, but are, in fact, still experimental. The pronounced favorites during the season have been what might be classed into a general term the berry shades. They run from deep mulberry in cloths and velvets to pale raspberry and even light strawberry reds in evening crepes and silks.—Harper's Bazar.

JUMPERS AND BRAIDS.

The "jumper," by which popular name the pretty little garment has become known which practically creates an indoor waste for street suits, is being transformed, and the short kimono sleeve, as well as the slashed flowing sleeve, is being resorted to to give the note of novelty to these increasingly useful little garments.

A marked feature of the winter and new spring designs already privately shown is the trimmings of fancy braids. They are soft meshed silky braids, from one to two inches wide, and are used abundantly on all dress fabrics. They are put on in either flat or shaped bands.—Harper's Bazar.

OF FRIENDSHIP AMONG WOMEN.

"Can Women Be Friends?" asks George Harvey in Harper's Bazar. "Sacrifices for the sake of love of man and offspring are recorded without number, but female Davids and Damons are not readily discovered in either history or legend. Professors of platonic affection continue to evoke jeers of incredulity, and the traditional disingenuousness of 'dearest friends' still plays well its part in caricature. The changeableness of woman's nature has become axiomatic. Can it be that, throughout the ages, even to these enlightened days, it has retained consistency in this respect alone? It suffices for us to raise the question; to others of more certain mind we relinquish the hazardous privilege of adducing evidence and passing judgment."

A GOLDEN OPPORTUNITY.

Automobilisis are not yet so common in Japan as they will be, but the sporting spirit is high, and they will get there in time. An enterprising automobilist, who is not afraid to let her out occasionally, is the best man to meet the aspirations of a Japanese maiden, who has imitated the white girls' practice and advertised for a husband. As translated by a correspondent of the Dundee Advertiser, her appeal reads:

"I am a very pretty girl. My hair is as wavy as a cloud. My complexion has the brilliancy and softness of a flower. My expression is as mobile as the leaf of the weeping willow. My brown eyes are like two crescents of the moon. I have enough worldly goods to pass happily through life with my husband, hand in hand, gazing at the flowers by day and the moon by night. If this should meet the eye of a man who is intelligent, amiable and of good address, I will be his for life, and repose with him later in a tomb of red marble."

Think of how a girl of these attractions and enterprise would grace a fast gliding automobile. All the livelong day she would be encouraging her escort to drive faster and go farther afield under the cheerful sunshine, taking a hearty share of the joys that never weary. Imagine her at the steering wheel with her cloud of wavy hair streaming behind and her mobile expression of face stirring the envy of all beholders.—Selah, in Automobile Magazine.

VISITING THE SICK.

One afternoon, not many days ago, I was ushered into a sick room that was crowded with friends and neighbors. The patient was lying near a darkened window through which shone just enough light to enable me to see that the strain of this band of visitors was fast wearing out her feeble strength.

On a near-by table, along with a number of medicine bottles, were to be seen almost every kind and variety of food which these kind friends had brought to tempt her impaired appetite. Even to a person in good health the sight of so much was repulsive, and to the sick it was anything but tempting. These persons had come on a visit, and were spending the day right in the sick chamber with no thought of the distress and harm they were causing the patient. The woman in charge of the household duties was overtaxed with the extra work being crowded upon her by these sympathetic friends, but no thought was given her either, or of any disturbance they were creating throughout the entire house.

A short call without the prevailing curious desire to "see the sick one" is sufficient and will be more truly appreciated by the household and prove an unmixed blessing to the patient. And if some little delicacy be taken to her it should not be associated with the medicine bottles, but kept out of the room or at least out of the sight of the sick person. These showers of kindness with good will intent so often result in harm to the suffering one that too much thought and care can not be given to such visits. And yet these evidences of thoughtlessness are of everyday occurrence. — Evaline, in National Stockman.

HOW TO LIFT THE BABY.

As there is a right and a wrong way of doing everything, the holding and lifting of a baby is no exception; therefore the young mother must learn the knack as well as the father, who is usually more or less awkward for a greater length of time. Fortunately for the baby, he sleeps the greater part of the first few months, so that while, to most people, he feels like a good sized jelly fish, ready to slip from the hands without a moment's warning, there is little necessity for lifting or carrying him about, and the elders learn their task gradually.

Begin at the earliest possible moment to learn the right way; that is, when holding the child in the right hand form a support for the back of the head and neck with the left hand. In carrying a baby hold it on the left arm, forming a cradle. Some mothers carry the baby on the right arm and others alternate; it is a good plan to accuste[illegible] to hold the baby on the le[illegible] as to have the right free[illegible] n whatever may be necess[illegible]

In lifti[illegible] from the crib, gather hi[illegible] together at the bottom [illegible] right hand, and while dra[illegible] down gently slip the left ha[illegible] his back until the fingers su[illegible] head while the arm is a[illegible] his back. Never grasp an[illegible] nd the body to raise him, [illegible] holding him sufficiently tight under the arms will prove hurtful; when three or four years old he may be raised this way with no ill effects. Remember, however, never to lift a child by the wrist or hand, as it may cause dislocation.

WOMAN LANDS ON PROFESSOR.

The American woman as an intellectual and womanly creature was vigorously defended by Lydia Kingsmill Commander against the attacks of Professor W. I. Thomas, of the Sociology Department of the University of Chicago, who places woman on the intellectual plane of the savage, and when she attempts to raise herself above that plane calls the effort unwomanly. Professor Thomas imparts his burning thought on the subject through the pages of his new book, "Sex and Society." Mrs. Commander is a worker of the Self-Supporting Women's League and an author.

Mrs. Commander replies:

"Professor Thomas is in an educational institution where the women are walking in and taking the prizes away from the men, and now when the women have won fairly he raises the cry that it is not womanly. It was man, and not nature, who set the standards of so-called womanliness. If nature did not believe that the intellectual woman was womanly she would not make intellectual women.

"Of the thirty-five buildings composing the University of Chicago group ten were built by women. If he measures intellectual accomplishments by business ability let me say that Mrs. Hetty Green could buy the University of Chicago—and its professors—[illegible] es over. In Kentucky Mr[illegible] reman is president of seven [illegible] corporations and made $1[illegible] ist year. In Texas a Mrs. K[illegible] million-acre ranch.

"The [illegible] of Chicago, where this pro[illegible] hes, is by general consens[illegible] dams—better than any pro[illegible] New York a woman con[illegible] utting in bids for pier we[illegible] Virginia there is a woman railroad builder. In Nebraska a woman has beaten the grain trust. Ida Tarbell was the first to make the Standard Oil Company listen to public opinion. No man did that."—New York Evening World.

Evidence.

"The evidence shows, Mrs. Mulcahey, that you threw a stone at the constable."

"It shows more than that, yer honor. It shows that Oi hit him."—Judge.