

FARM AND GARDEN.

MATTERS OF INTEREST TO AGRICULTURISTS.

Some Up-to-Date Hints About Cultivation of the Soil and Fields Thereof Horticulture, Viticulture and Floriculture.

Table with 2 columns: Item and Price. Includes Hoing 3 times, Plants and resetting missing hills, Nipping and pruning, etc.

For a long time the question has been discussed whether the vine could be manured without altering the quality of the wine produced, and whether the manure should be put directly into the vineyard, or first decayed in the compost heap.

In favored localities, something may be saved on cost of manure, labor, omitting winter protection, etc. But any attempt to reduce amount of labor, fertilizer, mulching, etc., will certainly result in reduction of both quality and quantity of fruit.

Orchard Grass. The orchard grass has many good qualities, both as a grass to cut for hay and as a pasture grass. It is rather coarse, if sown thin. It must be cut early, or you lose a great deal of value.

Letting in the Light. A firmer faith in the capacity and value of the soil is the need of the hour, and will give to our youth that charac-

Where Forests Cease.

The limits of forests upon the earth are determined by climate, and more especially by two principal elements of climate, heat and humidity. The nature of the soil is of only secondary importance.

But no tree can pass beyond its conditions of humidity or of heat. It is necessary for this great vegetable to have the heat of a summer of at least three months' duration, to permit it to develop its foliage, to blossom and bear fruit, to push out buds destined to expand the following year, to add a new layer of wood to the thickness of its trunk charged with the support of an ever-increasing summit.

These requirements bring about the results that in the arctic zone, where cold reigns almost continually all the year, where the oblique rays of the sun never succeed in melting more than the mere surface of the soil, of which the depths remain frozen, the conditions necessary for the life of the tree cease, and we find no more forests.

JESUS STILL REIGNS.

A THRILLING SERMON BY REV. DR. TALMAGE.

Golden Text for Last Sunday: "Unto Him Shall the Gathering of the People Be"—Gen., xlix, 10—Getting Near the Christian Standard.



THROUGH a supernatural lens, or what I might call a prophescope, dying Jacob looks down through the corridors of the centuries until he sees Christ the center of all popular attraction and the greatest being in the world, so everywhere acknowl-

edged. It was not always so. The world tried hard to put him down and to put him out. In the year 1290, while excavating for antiquities fifty-three miles northeast of Rome, a copper-plate tablet was found containing the death-warrant of the Lord Jesus Christ, reading in this wise:

"In the year 17 of the empire of Tiberius Caesar, and on the 25th of March, I, Pontius Pilate, governor of the Praetore, condemn Jesus of Nazareth to die between two thieves, Quintus Cornelius to lead him forth to the place of execution."

The death-warrant was signed by several names. First, by Daniel, rabbi Pharisee; secondly, by Johannes, rabbi; thirdly, by Raphael; fourthly, by Capet, a private citizen. This capital punishment was executed according to law.

The name of the thief crucified on the right-hand side of Christ was Dismas; the name of the thief crucified on the left hand side of Christ was Gestus. Pontius Pilate describing the tragedy says the whole world lighted candles from noon until night. Thirty-three years of maltreatment. They ascribe his birth to bastardy and his death to execution.

that chain and go to the south, and another surveyor take that chain and go to the east, and another surveyor take that chain and go to the west, and then make a report of the square miles of that vast kingdom of God's mercy. Ah! you will have to wait to all eternity for the report of that measurement. It cannot be measured. Paul tried to climb the height of it, and he went height over height, altitude above altitude, mountain above mountain, then sunk down in discouragement and gave it up, for he saw Sierra Nevada beyond and Matterhorn beyond, and waving his hands back to us in the plains, he says: "Fast finding out; unsearchable, that in all things he might have the pre-eminence."

But, I remark again, the people will gather round Christ as a sympathizer. Oh! we all want sympathy. I hear people talk as though they were independent of it. None of us could live without sympathy.

The world cannot offer you any help at such a time. Suppose the world comes and offers you money. You would rather live on a crust in a cellar and have your departed loved ones with you, than live in palatial surroundings and they away.

There ought to be a law passed that railway restaurant keepers shall take their apple pies.

The more worthless a man is when he leaves a town, the greater probability that he will come back.

Who will put that weary head upon the clean white pillow and watch by day and watch by night until the hoarse voice of the sufferer becomes the whisper, and the whisper becomes only a faint motion of the lips, and the faint motion of the lips is exchanged for a silent look, and the cut feet are still, and the weary eyes are still, and the frenzied heart is still, and all is still! Who will have compassion on her when no others have compassion? Mother! Mother!

Oh! there is something beautiful in sympathy—in many sympathy, wisely sympathy, motherly sympathy; yes, and neighborly sympathy. Why was it that a city was aroused with excitement when a little child was kidnapped from one of the streets? Why were whole columns of the newspapers filled with the story of a little child? It was because we are all one in sympathy, and every parent said: "How if it had been my Lizzie? How if it had been my Mary? How if it had been my Maud? How if it had been my child? How if there had been one unoccupied pillow in our trundle-bed to-night? How if my little one—bone of my bone and flesh of my flesh—were to-night carried captive into some den of vagabonds, never to come back to me? How if it had been my sorrow looking out of the window, watching and waiting—that sorrow worse than death?"

There are people who think Christ will come in person and sit on a throne. Perhaps he may. I should like to see the scarred feet going up the stairs of a palace in which all the glories of the Alhambra, and the Taj Mahal, and the St. Mark's, and the Winter Palace are gathered. I should like to see the world pay Christ in love for what it did to him in maltreatment.

While everlasting ages roll, Eternal love shall feast their soul, And scenes of bliss forever new, Rise in succession to their view.

PHILOSOPHY.

The love of money keeps many men from vice. The locomotive builder is noted for his engine-ality. The proper thing for a jury is to be firm, but not fixed.

The stinger a man is about valuable things the more apt he is to give advice. Comparing your sins with those of other people won't make your sinning any safer.

MANNERS OF GREAT MEN.

Fox would never stand covered in the presence of ladies. Calhoun was so absent-minded that he often forgot he was in company. Bancroft was rather reserved than otherwise with most persons whom he met.



THE LIMIT OF FORESTS IN THE EXTREME NORTH.

power. The vigneron at Argenteuil, near Paris, have been for years in the habit of manuring their vines with the street scrapings, with excellent results.

Thayer's Berry Bulletin.

The growers of berries for market should realize that ordinary farm methods are not sufficient.

Berries cannot be grown and marketed as easily as wheat, corn and potatoes.

Berry growing, like market gardening, requires the greatest concentration of good soil, labor and thought.

Too much land is the bane of most fruit growing as well as farming.

Success would be more certain if acreage were divided, and fertility, preparation and cultivation increased.

Intensified farming and concentration of energy are the diamond drills that bore out success.

Take counsel from books, papers, and practical growers, but let it be tempered with your own best judgment and experience.

Actual knowledge and practical experience should go hand in hand.

Let the beginner commence moderately, and go slow. Do only what can be well done. Nothing but the best product will pay.

Use a limited variety of best plants, producing large, firm, attractive fruit.

Have a note book ready and make a complete record of all facts and dates for future reference.

When one acre has been mastered, producing one or two hundred bushels of best fruit, then acreage may be increased.

Few realize the actual cost of bringing an acre of bush berries to a good bearing age—be careful.

You may safely estimate, that after securing land in a high state of cultivation, every acre, of good small fruits, well set, missing hills filled in and brought to a bearing age, will cost from \$120 to \$150 in well earned dollars or their equivalent in honest work at \$1.25 per day.

ter which is sure to come by patience and perseverance. We do not hear the discouraging word uttered without recalling an interview with an intelligent man from New York, whose grandfather conceived the idea of reclaiming a tract of land larger than Green Harbor marsh; going to work with courage, he cleared off the bushes and trees, opened drains at considerable expense, letting in light, receiving much in return, though not enough to pay the expenses. The property passed into the hands of a relative, who, with commendable spirit, prosecuted the work already begun. "Let us have more light," said he. "Does the property pay now?" we asked. "Yes; the net profit is ten thousand dollars every year."—G. J. Peterson.

Pistillate and Staminate Grasses.

The grasses differ in their floral structure. They are not all uniform in their mode of growth. We have a class that may be called dioecious grasses; that is, grasses in which the male and the female, or the staminate and pistillate, organs of the flower are arranged on entirely distinct plants. That is the case with only a very limited number of species. What is called the "buffalo grass," which grows in the South, and in Colorado, and generally on the plains, is one of that kind. I have seen patches of buffalo grass in Colorado, composed entirely of staminate, or male plants; and other patches composed entirely of pistillate, or female plants. Now, the pistillate plants must get their pollen from the staminate plants, which may be at some distance off. It was at first supposed that they were different species, until the fact was discovered that one grass was simply a staminate, or male plant; and the other a pistillate, or female plant, both belonging to the same species. Of course, the seed is produced only on the pistillate plants.

Another class of grasses may be called the monoecious grasses; that is, where the staminate and pistillate flowers are on the same plant, but in distinct positions, separated from each other. The most familiar example of that is our common Indian-corn. Every farmer knows that the staminate flowers of Indian-corn come on the top, called the "tassels," while the pistillate flowers are arranged on an axis along the main stalk, called the "ear," and that the pollen from the staminate flowers must find its way through the pistils, which are the silks attached to the ears, as everybody knows, before fertilization can take place.—Flint.

sterility, is limited by an undulating line, which runs over Scandinavia between the 70th and 71st degrees of latitude, cuts at an average of 68 degrees all the northern shore line of Siberia as well as that of North America, and descends in Labrador to the 58th degree. Below that line the forests appear and extend over all the earth southward to the limits of the continents, which do not approach too near the antarctic zone to prevent the growth of trees. However, these forests are broken here and there by mighty plains, such as the steppes of Russia, the prairies of the United States, and the pampas of the Argentine Confederation. There are also the great plains of Australia, the desert of Sahara, the sandy plains of Persia and of Chinese Mongolia, the latter like great leprous patches upon the face of our earth.

Fattening Broilers.

A Pennsylvania subscriber wishes to know how long it takes to fatten broilers, and how to dress them for the Philadelphia market. We give his inquiry below:

I have a lot of young chickens four to six months old, and want to know just how long it will take to fatten them up in the quickest time. Also how to dress for the Philadelphia market.

It is not an easy matter to fatten broilers, as the food rather makes them grow instead of fattening. Then, again, to force them, may result in leg weakness, bowel disease, etc. Do not begin to fatten until they are eight weeks old, and then allow two weeks for them to fatten. Feed three times a day and scatter a gill of millet seed between meals. Here is an excellent fattening food: Melt one pound of crude tallow in half gallon of boiling water. While boiling thicken with a sufficient quantity of the following to form a stiff dough: One quart of corn meal, one quart of ground oats, one quart middlings, one pint ground meat, half pint linseed meal, one tablespoonful of salt.—Am. Poultry Keeper.

Improve the Farms.

Benefits resulting from experiments upon unproductive tracts of land are very apparent; and any improvement advancing the value of farms is of pecuniary benefit, not only to the actual owner of the soil, but to the community as a whole. No prosperous business can be carried on, which confines the advantages to be derived within a narrow circle, as success in one branch of business assists another. Each acre of land now unproductive, that is made to produce any description of crop whatever in paying quantities, adds so much to the general welfare of the whole, and should thus be recognized.

Several patents for roofing glass have been taken out in the last few years.

Table with 2 columns: Item and Price. Includes Total expense, first year, Removing covering, Cultivating 15 times, etc.