

## AGRICULTURAL



## Grumbler on Fruit Culture.

UTAH COUNTY, April 17th, 1862.

ED. DESERET NEWS:—

Grumbler has just returned from the city where he has been attending conference, etc., and having sojourned a while in the "city of industry" begins, with the genial warmth of the springtide sun, to "thaw out" a little more effectively, and with the thawing process begins to see more distinctly the multitudinous branches of labor open for energy and advancement.

In the construction of a "model cottage" I find I am lacking adobe makers and layers, joiners and painters, and then want cabinet makers to furnish it, and not a spare hand can I find to render the needed assistance so I shall be obliged to "help myself" whilst all the neighbors and the rest of mankind, are employed in agriculture.

In looking about the city for fruit trees and shrubbery to make useful and ornamental my grounds I discovered a great scarcity in both these departments, although at the selling prices a few men who were able to fill the demand might realize fortunes, for I never saw nursery stock seized upon with more greed, or sold at greater prices.

I would recommend that some one man in each settlement provide himself with all dispatch with material and plant good and extended nurseries. The trees and shrubs will be wanted *ad infinitum*, and besides it pays. From the best authorities I learn that the apple, apricot, pear, plums, cherries, strawberries, gooseberries and currants are perfectly hardy and fruitful bearers throughout our principal settlements. In some sections peaches, almonds, nectarines, grapes, raspberries and blackberries may be grown in plenty. To obtain a grape perfectly hardy I shall doubtless have to grow seedlings from grapes grown in the Northern States, and when I have one of quality to suit I shall have little fear of the frosts of our winters. So far as I have had an opportunity to observe the fruit in this State I never saw finer specimens, although I have often visited the best Eastern markets, and as to the growth of trees, certainly no country can equal these valleys, when from four to eight feet is no uncommon growth upon a limb or sprout of a fruit tree in one season under favorable circumstances. Past experience proves that the propagation of fruit in these valleys will in future become an important item of industry, and therefore all persons should make themselves familiar with the process, not only of reproducing and propagating but of improving the same—and as there is still time to operate, and trees are scarce I will give a few hints upon a new mode of

## GRAFTING THE APPLE.

Cut square the limb to be grafted then with a knife cut a perpendicular slit in the bark from the top downwards an inch, now cut a scion with a smooth straight slope of an inch across from heel to point of the cut, then beginning at the point push the scion gently down between the wood and bark of the stump till the cut of the scion is nearly out of sight, then secure with little strips of waxed grafting cloth, wound tightly around, or tie fast with twine. This is the most simple, sure and strong mode of grafting if properly done. A more common way, and perhaps in some cases more convenient, is to get the roots of apple, hawthorn, or service berry, cut from two to four inches long, according to the amount of fibres on the roots, and graft in the old fashioned style, then cover in setting to half the length of the scion.

## BUDDING

May be commenced as soon as the bark peels freely. The process needs no description for every one understands it. Pears may be budded into apple freely; and apricots, nectarines and almonds, into peaches, with a fair chance of success. The plum is better budded into the stocks of wild plum, and that too, near the ground, so that it may be rooted from the improved stock if necessary. Native plum stocks will annually grow large enough in one year to bud if well cultivated, and when three years old fruit may be expected.

## STRAWBERRIES.

Few varieties of fruit offer greater inducements to cultivators, in our soil, than strawberries, both on account of the great delicacy of the fruit, and its wonderful productiveness. Besides this the strawberry produces freely the second year after setting.

If the plants are set for fruiting exclusively the following directions are necessary for

## CULTIVATING:

Select ground rather clayey than of light soil, mix in an abundance of well rotted manure, then rake it and pulverize. Then select the sort of fruit you prefer, and set your plants twelve inches apart each way with water marks between each row. Cultivate well and keep the ground free from weeds and clip every runner till after the bearing season is over. Late in the fall take out every plant except the standards as they were set, stir the ground and cover with a little coarse manure. If you wish to get fruit a week or two earlier than your neighbors,

about the first of April carefully rake off the coarse portion of the manure, and your bed is ready, until weeds spring up. I have been assured that some berries grown in the city last season, by Mr. Phineas Young, measured four inches in circumference!

## ENGLISH GOOSEBERRY.

This is a perfectly hardy fruit, is very prolific, and may be easily grown here to the size of a plum. The plants are easily propagated either by cuttings or layers, the latter mode is the most desirable and brings fruit the quickest. The process is simple and easy; and currants, raspberries and apple sprouts may be readily rooted in the same way.

From limbs of any tree cut small hooks with a spike three inches long, bend the limb into a small cavity in the ground an inch deep and stick the hook closely over the limb and cover the spot with earth. When rooted cut the twig from the parent stock and remove it in the fall or early in spring. More anon.

J.

## Planting Trees.

A correspondent of the *Country Gentleman*, in a communication relative to the planting of fruit trees, says:

Most writers on fruit culture are agreed on the injury resulting from deep planting. Whether in noting the assertion, they all have clear and well defined ideas of what deep planting really is, is not so apparent. I rather suspect that the term is frequently employed by many who could not tell you whether a certain depth was too deep or the reverse. In fact it is one of those very indefinite and vague terms that get into print and are used "promiscuously." Now I here put it to those who may hereafter use the term "deep planting," to state positively what it means in connection with the subject. It is frequently given as an illustration, that when a seed, an acorn for instance, drops on the ground and vegetates, the roots and stem of the future tree will be properly situated as regards depth of planting. Notwithstanding that his a/d similar statements are constantly being made, we never see gardeners sowing peas or any other seeds on the surface. On the contrary, all advices recommend covering more or less in depth with the soil, and very properly too, as all who have ever attempted raising plants from seeds are fully aware.

The necessity of keeping the roots of plants within the influence of the atmosphere, is one of the most important truths in culture, but it does not follow that they should be kept on the surface of the soil. The impracticability of maintaining roots in a healthy condition, and in a medium where they can perform their offices, on the mere surface, must be well understood by all cultivators. Frequently in dry summers the soil is entirely destitute of moisture for a depth of twelve or more inches, and even if possible for a tree to survive the summer, the injury from freezing in winter would act very fatally. It may be said that mulching the ground with six inches of manure, charcoal or some other good non-conducting matter will obviate this difficulty, but where is the soil that will preserve a proper porosity after a series of heavy rains in summer, or the consolidating tendency of heavy winter snows. All experienced cultivators are convinced of the propriety and absolute necessity of keeping a loose, free surface soil, and the thorough beneficial effects of harrowing and surface stirring; these effects are too apparent to be gainsayed, and this stratum of stirred soil must be above the roots. Indeed there is no better protective agent against the drying out of root moisture than six inches of well pulverized soil, leaving out of the question the undoubted benefit gained by the amount of plant food liberated by exposing all portions of a soil to the decomposing influences of the atmosphere.

On wet clayey soils, where draining should be, but has not been executed, and where trees are desired, it is a practice indited by common sense as well as by phyto-logical reasoning, to plant shallow. By planting shallow it is not meant that the roots are to be superficially and imperfectly covered, but that instead of digging a hole in the ground, the tree is set on the surface and soil brought to it, covering it with five or six inches all over the roots. On dry and well drained soils, the plants are set in the soil, so that the roots are sufficiently covered, but yet it is not to be understood the latter are deep planted. No, both are properly planted according to the circumstances prevailing in each case.

Other circumstances besides the above will occasionally influence the depth of planting. Dwarf apple and pear trees grafted on the Paradise and Quince stocks, have to be so planted that the stocks are thoroughly covered with soil, so that they may be put out of the reach of the borer. These trees are grafted so that this practice can be adopted. The necessity of proper grafting in this case has been well shown by Mr. Mead, the present editor of the *Horticulturalist*, who was induced to purchase dwarf pears grafted on stocks twenty inches high, and in order to plant them according to rule, had to insert them nearly two feet in the ground to ensure the covering of the junction. This was a very definite case of deep planting, and as the trees mostly all died, it left not a doubt as to the impropriety of the practice. But then it does not follow that we should stretch to the opposite extreme and plant so shallow as not to properly cover the roots. My own practice has been much modified as observation and experience enable me to judge that the roots of

trees cannot long be kept without injury on the immediate surface of the soil.

From the Genesee Farmer.

## Mechanical Tools for Farmers.

No good farmer should be without a set of mechanical tools sufficient to enable him to do such repairing of his agricultural implements as any man can, and ought to do, rather than employ a professional mechanic.

In the first place, you require a room in some out-building in which to keep your tools and to do your mechanical work. A work-bench, which any man can do in a few hours, is first to be erected near a window. Over this bench, against the wall, place a shelf about a foot wide and twelve feet long, and under it put up a rack for your small tools, such as chisels, gimblets, brad awls, &c.

The following are among the principal tools needed: a landsaw, broadax, hatchet, two or three planes, hammers, chisels of various sizes, a half a dozen gimblets, an iron square, a carpenter's two-foot rule, etc. Let all the tools be of the best made, and have a sufficient variety to enable you to do any small job that it is possible for any one to do, who is not a mechanic by trade.

Procure a large and various supply of nails and screws—wrought nails of different sizes, clout nails, brads, tacks of the largest sizes—and have them so arranged that you can lay your hand upon any kind in an instant. You will be surprised with what ease and skill, after a little practice, you will be able to "tinker" up your tools out of repair, and even to make new ones, during the winter season.

With a good set of tools, all in complete order, when a door, lock, or any thing else gets out of order on your premises, you will be able to repair it, in most cases, as well as any carpenter. In a few years, one becomes so expert in the use of tools, and he feels able to go out to work to help his neighbors erect their houses or out-buildings, or to put up his own where no very nice work is required.

Next to an education at school, every farmer should instruct his sons in the use of tools; and no one will ever say that it was time spent in vain.

T. B. MINER.

## A BRAVE WOMAN.

A NARRATIVE OF THE REVOLUTIONARY WAR.

It was a warm and sultry morning in the last of June. The inhabitants of Monmouth were all astir with the knowledge that the two armies were in their midst, and by their motions sustaining the probability that a general action was about to be hazarded. The British army, now commanded by Sir Henry Clinton, assumed one of the strongest situations. Upon the high grounds about Monmouth Court House they laid their flank on the border of a small wood, the last guarded by a deeper one, and the rear running toward a morass.

The army was disposed in such adjacent positions as to be able to harass the enemy in the rear, and take advantage of their first movement. The other generals, Lafayette, Green, Wayne, Stewart and Scott, were directed to hold their troops in readiness to support the front.

Early in the morning notice was given that the enemy was in motion. Gen. Lee immediately prepared to make an attack upon them, and he was soon joined by Generals Dickinson and Morgan, with their spirited troops.

In full view of the house of Hollins and Molly this action commenced. Hollins put on his military suit at once. The spirit which animated every true American was nearly aroused at this spectacle, and he was impatient to mingle in the strife.

"Will you go, Hollis?" asked Molly anxiously.

"Yes, dearest. Can I remain here tamely, and not offer my assistance in the defence of my country? I shall only be a private; but there will be work enough for me to do."

"Remember the fate of your father," faltered Molly.

"I thought you were brave, my own wife," said Hollis with a smile of affectionate pride.

"Battle scenes have not lost their charms for me yet, though I confess to unusual misgivings this morning," replied Molly.

"I shall return at night, darling, it may be with new glory attached to the honorable name which my father transmitted to me. I must fight those red-coats, Molly. God bless you, and good bye for the present," returned Hollis, bringing her to his breast with a parting caress.

"A blessing go with you, husband," said Molly, as Hollis sped rapidly from the door.

The enemy advanced so near Molly's house that she could quite plainly distinguish their motions.

"O, that I were a man!" she exclaimed; "I would give those British tyrants free doses of death. To think of their approach to our very doors! Of their burning the beautiful homes of some of our neighbors, because they would not turn traitors!"

She discovered Hollis engaged in the duty of cannonier, and she watched his motions with the deepest interest. As the morning deepened into day, the weather became intensely warm; not a leaf of a tree moved, and the sun poured down such volumes of heat, the earth seemed brazen and parched to a painful endurance.

"Hollis will suffer with thirst!" Molly be-

thought herself; "I will go and carry him a pitcher of water from the cool spring."

She hastily communicated her intentions to Mrs. Rodgers, the housekeeper, and threw on her hat.

"I would advise you," remonstrated Mrs. Rodgers, "to keep within house to-day. The Britishers will kill you, like as any way, if you go out there."

"I shall go," replied Molly. "How good the water will taste to him when he is struggling so hard in this heat!"

Her glance now fell upon Hollis again; his hair was thrown back from his forehead, he had cast aside his coat, and was loading and discharging the cannon with a mirable coolness, while the balls of the enemy whizzed about his head. Molly was strongly impressed by the picture; he had never looked so glorious to her before, save when he was about to sacrifice his life at the pine tree, the central object of savage air. She could not be restrained longer. Skipping away to the cold spring a few rods distance, she filled the pitcher, and remembering Hollis's liking for spearmint, paused a moment to break a few leaves of the rich bed fringing the bank at her feet. These she settled in her pitcher as she ran up to Hollis. He received her offering gladly, blessed her for the thought in a low voice, and drank the whole before he resumed his duty.

Molly ran away regardless of the many eyes which had been attracted by the very strange sight of her white muslin dress amid the bloody strife. She then returned to her post of watching with breathless anxiety. Unconsciously she would break forth into words of encouragement for her favorite generals, as she distinguished their uniforms, or the noble horses which they rode falling dead beneath them.

Once more she ventured out to carry water to Hollis, for he nobly and unremittently worked on in the face of the foe. She had refilled her pitcher, when turning she saw Hollis fall to the ground. With a blanched cheek, and a horrible foreboding rushing over her heart, she lost no time in reaching the spot.

Alas! he was dead! A shot of the enemy had killed him instantly!

"Take that cannon away," said General Wayne to one of his soldiers; "we cannot fill the place by as brave a man as has just been killed!"

"No!" returned Molly, looking upon the general with a face like death, yet calm in the inspiration of bravery heightened to heroism; "the cannon shall not be removed for the want of some one to serve it, since my poor husband is no more, for I will use my utmost to avenge his death."

Molly was now fairly aroused. She loaded and discharged the cannon, while the officers beheld her with undisguised admiration.

"There!" she exclaimed, after the first fire; "take that ye remorseless enemies and wait for the next!"

Again and again she discharged the cannon, dealing death and destruction at every shot.

"Whom have we here?" inquired General Washington, attracted to the spot by the singular spectacle.

"An angel of the host of Michael. The powers of hell would drop before her!" replied General Wayne.

Molly now determined on a *coup de main*. Accordingly she loaded the cannon with double the ordinary quota; then discharged it. A terrible crash succeeded. Molly was brown into the air several feet, then she fell to the ground with great violence. Three British soldiers were killed, and an officer of high rank was apparently mortally wounded. Many who stood by were thrown down, and general confusion prevailed.

This last discharge had broken the cannon into fragments.

For a few minutes Molly was insensible, but she soon rallied and rose with a steady eye. The soldiers loudly applauded her, notwithstanding which she immediately withdrew to her home, followed by two soldiers with the body of her husband.

On the following day Molly was surprised by a visit from Generals Washington, Lafayette, and Wayne, who had witnessed her brave conduct at the battle ground. Molly retained her self-command.

"Our army, madam, being about to leave Monmouth, we took this early opportunity to express to you our entire approval of your action of yesterday," said General Washington.

"Sir, says Molly, "I only wished to serve my country; the death of my husband made me almost frantic."

"You merit a coat of arms like our Joan of Arc," said Lafayette; "his contained two golden lillies and a sword pointing upwards bearing a crown."

"I should prefer eagles in the place of the lillies," said Molly.

"You shall have an epaulette for your coat of arms," said General Washington, rising in his accustomed dignity of manner; "I here confer upon you the rank of Captain, as a testimonial of my regard for your service."

The other generals arose, and crossing their arms upon their breasts, beheld the scene with a smile of gratification.

"Many thanks, General," said Molly, the tears rushing to her eyes; "but would that my husband had been spared to have received this honor instead of myself."

"I trust that you will come to a glorious end," remarked General Lafayette; "unlike the Maid of Orleans, who was burned at the stake."

"I have come to that already," returned Molly; "at least I have been taken prisoner by the Indians and confined to a tree, where I