

HE HELPED TO OPEN THE WAR.

The man who loaded the first gun fired at Fort Sumter and thus helped to open the greatest civil strife in history, lives in the mountains of Georgia. He is Thomas W. Wheat, a stalwart mountaineer who stands six feet tall and has an eye like an eagle. He still wears his Confederate overcoat of gray. Wheat was 21 years of age on Christmas day, 1860, and, like a great many other country-bred youths, he wanted to see a little of the world. So he went down to Augusta, from his home in middle Georgia, and started out for a holiday frolic. It proved to be the most memorable outing of his life.

"The boys," said he, "got after me to go with a crowd of them down to Charleston and fight the Yankees. I had nothing against the Yankees, but I was in for anything that promised a little sport, and I agreed to go with them. The recruiting officer readily took me and I was stationed on Sullivan's Island in Charleston harbor. After the Star of the West affair we knew that there was some movement on foot and were not surprised when the long roll sounded just after midnight on the morning of April 13, 1861, and we were ordered to take our places at the guns.

"It was my business to load the first cartridge for the 10-inch mortar, and while our commander, Capt. Hallenquist, took his station near the gun, I measured out the powder, loaded the cartridge, and cut the fuse. It was just growing light and the fog hung heavy on the water between our position and Fort Sumter. We could see the dim outlines of the old fort, and back to the landward, as the mist thinned, we could see figures moving to and fro



along the Battery in Charleston. It was the crowd gathering to witness the attack on the fort.

"Suddenly the signal was given just as the fog lifted and revealed the outlines of the fort, and, springing backward, Capt. Hallenquist pulled the lanyard. Boom! the shot rang out and was echoed and re-echoed from shore to shore. My blood was up, and in a twinkling another charge was rained down the black throat of the old mortar and I was permitted to fire the second shot. Had I known all that it meant then I might not have been so eager for the honor, but I was young and my blood was hot, and I was ready for anything.

"The firing, of course, became general, and the guns from old Sumter answered our challenge and the deep baying of the war dogs soon became a continuous roar. I was kept so busy working the guns that I paid little heed to what was going on until the order came to cease firing. Then I saw the officers in the boat being rowed across to the fort to complete the articles of surrender."

Life During a Siege.
The conduct of the people of Atlanta during the siege of that city in 1864 was truly remarkable. When Sherman's mighty host invaded the city, writes Wallace Putnam Reed, there was general consternation among the citizens. Until the very last day the people had believed that they would be spared the horrors of a bombardment. Their generals, high officials and newspapers had assured them that the invaders would be driven back, and that the citadel of the Confederacy would never undergo the hardships of a siege.

This proved to be a mistake. In the latter part of July shells began to fall within the city limits, and two or three battles had been fought almost within the precincts of the suburbs. The outlook grew more serious every day, but in a short time the beleaguered inhabitants became accustomed to their new conditions. Hundreds of big guns thundered away, and the crash of small arms kept everybody awake during the sultry summer nights.

After a week or so the non-combatants in the city made up their minds to stand the racket and bear it philosophically. They went about their business and pleasures as before. The newspapers came out as usual, the merchants kept open their places of business, and the society people continued their round of visiting. Of course, there were many inconveniences and dangers. It was impossible to have a social function unless it was held in a place where it was not possible to be seen. The Atlantaians agreed that they would make the

best of the situation and accept it. So old and young pretended to be satisfied and confident as to the final outcome. There were dinners and receptions, and people continued to marry and give in marriage.

It was very sad to wake up in the morning and learn that the family next door had been killed during the night by a shell, but such calamities had to be endured. It was shocking to hear that several young ladies and gentlemen or a few children had fallen victims to the horrors of the siege, but the newspapers would then remind their readers that such evils were only temporary, and that in a few days Sherman's troops would be routed and driven back to Tennessee.

During the long summer days in August the little children met and played, and laughed joyously as the shells whistled above them. Ladies visited their neighbors, and when they crossed from one side of the town to the other they waited until an occasional shower of shells was over, just as they would for an April rain, and then skipped merrily homeward, laughing at the mishaps of the day.

Grave merchants and lawyers never missed a day at their places of business. Sometimes they were disturbed or killed by a stray missile, or they were summoned to the assistance of a neighbor who had been wounded in this manner, but they never complained and never lost their nerve.

They seemed to believe from the first that Sherman would be defeated. The siege had lasted nearly forty days before the citizens began to despair. Then there was trouble and confusion. Most of the well-to-do people left Atlanta, but they found it impossible to carry their goods and furniture with them. Everything in the shape of property had to be left behind for the plunderers.

The situation rapidly grew desperate, and a panic seized the 13,000 people who were left in the city. They found it almost impossible to get anything to eat, and they were in constant dread of what would happen when the Federals should enter, flushed with victory and maddened by the resistance of the Confederates. These helpless and disheartened men, women and children who were unable to seek a place of refuge held many consultations, but they were unable to afford one another much consolation. They realized that they were seeing the beginning of the end.

Day by day and night by night the besieged inhabitants lost more and more of their spirit and confidence, and spent more of their time in the bomb-proofs in their back yards. These bomb-proofs were holes dug in the ground and covered with wood, iron and clay. Some of them accommodated large families and afforded such ample protection that no one was killed in them during the siege.

The trouble grew worse, and finally one hot night in the early part of September, when a pall of yellow dust hung over the city, there was a general feeling of unrest and despair.

Not a word was spoken by the officials, but it was plain that something unusual was going to happen. During the night the army wagons and marching men made the streets noisy and dusty until the early morning hours, when a volcano broke loose in the eastern part of the town in the shape of seventy carloads of ammunition which the Confederates were blowing up. Everybody knew what that meant. It meant the evacuation of the place.

When the next morning dawned everything was quiet. Hood's army had departed, and only the unarmed citizens were left.

A few hours later Sherman's legion had occupied every street and square and vacant house. To do the conquerors justice, they behaved very well. They committed no outrages, and treated the citizens considerably in the main.

In a few days everything settled down; the citizens were sent either north or south; and Sherman's 80,000 men held the place as a fortified camp until they started on their famous march to the sea.

Changed His Mind in Later Years.
The Baltimore Sun says: "Capt. R. E. Park, of Macon, Ga., was in Fort Delaware prison with Col. John R. Fellows, the famous New York attorney, who died recently. Col. Fellows was at that time only 20 years of age, but was one of the staunchest and most loyal adherents of the Confederacy. In the prison with Capt. Park and Col. Fellows were a number of other Confederates, all of whom were required to sign the oath of allegiance to the United States. Col. Fellows, who even then had gained some fame as an orator, became so indignant at the request of the prison officials that he mounted a barrel, and in the most impassioned eloquence urged his fellow prisoners to refuse to sign, and not one of the prisoners took the oath."

Runaway Horses are Unknown in Russia.
No one drives there without having a thin cord with a running noose around the neck of the animal. When the horse bolts the cord is pulled, and the horse stops as soon as it feels the pressure on its windpipe.

The size of the new harness is expected to amaze us.

AGRICULTURAL NEWS

THINGS PERTAINING TO THE FARM AND HOME.

Best Method of Preserving Fodder Corn—How to Relieve Choked Cattle—Late Maturing Potatoes Are Most Productive.

Preserving Corn Fodder.
A report from the Vermont Agricultural Experiment Station says for two years past experiments were conducted to determine the best method of preserving the corn plant for winter use. Four methods were tried. First, whole ensilage was made by running the newly cut corn through a cutter, reducing it to one-half inch lengths, then putting into the silo. Second, the ears were husked, cribbed, dried, ground, cob and all, and fed in connection with the stalks, which had been previously cut and made into ensilage; this was called stover ensilage and meal. Third, the fodder was preserved in large shocks, and before feeding was run through a cutter, ears and all, and cut into one-half inch lengths. Fourth, the corn was husked from the fodder, ground with the cob and fed with the stover, after it had been run through the cutter as needed from time to time.

Samples from the material preserved by the different methods were carefully analyzed, and the fodder was fed to a herd of fourteen milch cows. It was found that each of the methods preserved about four-fifths of the dry matter harvested, the loss from each being practically the same in quality and in character. The fodders kept in the shock lost more and more dry matter as the winter progressed. The ears in the silo during the last test lost more of their food value than those preserved in any other way, this being the reserve of a previous test. The relative cost of placing the same amount of dry matter in the manger was greatly in favor of whole ensilage. Time and money spent in husking and grinding the ears were wasted, as better results were obtained when the ears were left on the stalk. The ensilages were relished much better by the cows and they do better upon them.

—Farm News.

Relieving Choked Cattle.
"I have never known my method of relieving choked cattle," says a writer in an English farm paper, "to fail in giving instant relief. I cut a stick about four feet long and one-half an inch through at the large end, with prongs like fork tines about one inch long at the small end. The stick wants to be straight and smooth. I generally cut a small gray birch. Then wind the prongs with yarn until well covered and sew over and through this a piece of cotton cloth, making a ball some inches in diameter securely fastened to the small end of the stick. Grease the ball well with lard, insert in the animal's throat, and push it down the length of the stick if need be, or until the substance is forced into the stomach. Then withdraw the stick and the creature will be relieved. I have been called in the night to go four miles to relieve an animal that had choked for hours. I relieved her in two minutes after the stick was ready, so that she commenced eating immediately. Two or three men had tried every way they knew for hours without success. The creature was choked with a potato."

Late Maturing Potatoes.
Most of the very large growers of potatoes plant mainly of the late-maturing varieties. There is a good deal of loss in marketing early varieties, especially those dug while their skin is still tender, and is broken by being rubbed against. In hot weather such potatoes rot easily, and though the price is higher there is not so great profit as for the more productive later crop that can usually be marketed without injury. Early potatoes do not generally produce heavily. Hot, dry weather shortens the crop, while with late potatoes planted late much of the growth of the tubers is made after the heated term has passed.

Fall Destroys Weeds.
Wherever salt is sown so that it comes in contact with germinating seeds it will rot and destroy them. The first germ of seeds is very tender, and as it starts out the seed gives out some moisture which dissolves the salt. The effect of very small quantities of salt is to decompose vegetation of all kinds. A large amount might pickle it and prevent decomposition. But either small or large, it is destructive of the germs of vegetable life. But if there is a great deal of rainfall the salt is displaced, and so mixed with surrounding soil that little injury to the seed is produced.

An Impromptu Filter.
An impromptu filter will be found convenient. Buy 5 cents' worth of powdered charcoal; put it in a piece of funnel, together with some small stones—fine pebbles are best—and tie it to the spigot. The water running through this will be quite clear. Be sure you have coarse flannel, as the charcoal sifts through muslin. If it runs too slowly put something under the spigot and let it run while you are doing something else and dip it out afterward. The increased clearness of the water will repay you.

Trees in Tilled Fields.
A few years ago we wrote on the expediency of keeping scattered trees left for shade in pastures in fields that every few years had to be broken up and used for tilled crops. The grass may or may not be injured under the tree, according to its variety and habit of growth. But wherever the field was planted with either corn or potatoes the blight effects of the tree sapping

the soil of moisture were to be seen as far either way as its roots extended. At the time our views met much severe criticism from those who regarded the trees as objects of beauty, and to be spared, whatever they cost to the farmer. But the loss from plowing, wasting seed, and labor in cultivating crops under trees and getting nothing in return has convinced most who a few years ago were critical that they were backing a luxury that not one farmer in ten can afford. Keep the trees if you wish in land that is to be always in grass, but if it is to be plowed and cultivated, clear them out so that all the labor applied may have its fullest effect.—American Cultivator.

Plowing and Reseeding.
Within the past few years there have been more than usual complaints of grass and clover seeds not "catching" well, and of "ramming out" after an apparently good seeding had been secured. Drought, or hard freezing in winter, are commonly given as reasons for these grass failures. But in many cases we suspect that this does not explain the whole difficulty. As vegetable matter in the soil decreases it is much more injured by drought than it is while the soil retained its virgin fertility. Our climate is not a moist one, like that of England, and our winter cold is much more severe. We cannot expect permanent grass either for pasture or meadow. To plow and reseed every second or third year seems to be a necessity of good farming in our Northern States. Nor is this necessarily any real hardship. The first year or two after seeding the crop is always better than after, and then, too, there is the best sward to plow under. English turf may keep thickening as the years pass by, but our grass lands are sure to grow thin. The longer the replowing is delayed, the more difficult it is likely to be to get a good catch with the new seeding.—E. J.

Keep Live Stock in Good Condition.
It is the best and safest plan to put all the live stock on winter rations in good time and before they become really hungry and lose flesh by the want of nutriment in the food gathered from the fields. As soon as a frost has taken the starch out of the herbage and lessened its ability to nourish an animal the main supply of food should be given from the winter stores. To fall off now is to keep out of condition all the winter. It is quite possible to starve an animal with success in the winter, but the consumption of food will be considerably increased over and above what would be required at any other season. It is an old saying that an animal well summered is half wintered. It is perfectly true, for once the system is in a thrifty condition it is more easily kept so than it can be recovered from a lowered state of health and vigor. Thus just now it should be the effort to prevent any falling off in the condition and put all the stock into winter quarters in as fine a state of health as is possible.—Orange Judd Farmer.

The Strawberry Patch.
The family strawberry patch is not usually large, and can therefore be given the best of attention. Rake the beds and clear off all the refuse, or burn the beds over. Then sprinkle fine bonemeal and muriate of potash over the rows, or use well-rotted manure that is free from litter, covering the beds with straw or salt hay, and placing cornstalks or brush on the hay. Early in spring remove the mulch and sprinkle nitrate of soda over the rows before the plants begin to grow.

Farm Notes.
There is no charm in allspiced farming, none in weedy fields, fences, fence corners or barns, or with buildings in a general state of disorder.

Before the ground freezes see that good drainage is provided around the stables and sheds, the fruit and vegetable pits and in the orchard.

Low-grade fertilizers cost less by the ton, but cost a great deal more if measured by the benefit derived. If compelled to buy fertilizers at all buy good ones. If you are not posted you can find neighbors who are.

Turkey raising is becoming more profitable and popular. Like sheep, they grow and fatten in the fields on what would be otherwise lost; besides, their eating of insects by the million is a benefit to the crops. A good crop of turkeys brings a fine income for a little expense. Their long legs enable them to move more easily anywhere.

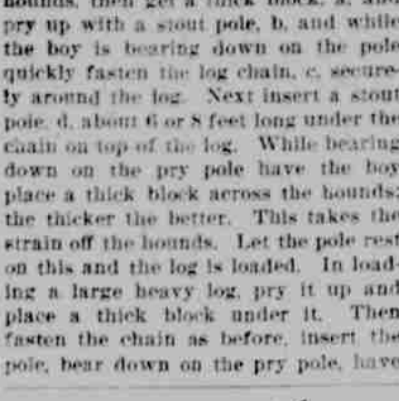
The fall is the time to ditch and fill the land for drainage, as the work can be then done at less cost than at any other period of the year. Lands in the West that have been tilled have gained sufficiently in one year, by the increased yield per acre, to more than pay the cost of drainage. Every year that wet land is left undrained is a loss of just so much time that could be gained by drainage.

An orchardist says: Peach trees will not bear choice fruit when growing in soil. In fact, there are few fruit trees that will not produce better fruit and more of it if the grass is prevented from growing near them. Fruit trees in poultry yards, where the ground is kept constantly bare of all vegetation, usually bear excellent fruit. Of course, some allowance must be made for the fertilizing benefits received from the droppings of the fowls.

In harvesting, as well as in storage, potatoes should be exposed to light as little as possible, says Farmers' Bulletin No. 35 of the United States Department of Agriculture. In storing potatoes a low temperature is required. The potato tuber is unharmed by a temperature of 33 degrees F., and one authority gives the freezing temperature of potatoes 30.2 degrees F. Warmth favors sprouting, which injures potatoes, both for planting and eating.



To Load Logs.
Roll the log on a good-sized pole, back the wagon, the butt end of the log should be about the center of the bounds, then get a thick block, a, and pry up with a stout pole, b, and while the boy is bearing down on the pole quickly fasten the log chain, c, securely around the log. Next insert a stout pole, d, about 6 or 8 feet long under the chain on top of the log. While bearing down on the pry pole have the boy place a thick block across the bounds; the thicker the better. This takes the strain off the bounds. Let the pole rest on this and the log is loaded. In loading a large heavy log, pry it up and place a thick block under it. Then fasten the chain as before, insert the pole, bear down on the pry pole, have



A SIMPLE WAY TO LOAD LOGS.

the block placed across the bounds, and the log is again loaded. By this simple method one man and a stout boy can load any reasonable size log without any heavy lifting.—Farm and Home.

Hard-Milking Cows.
There is nothing more provocative of profanity than to milk a hard-milking cow, especially if she is a kisser as the hard milker is apt to be. Farmers who pray that they be not led into temptation ought to give more care to the kind of cows they keep for their boys and hired men to milk. It is a pretty serious business putting temptations to swear in other people's way. There is another reason why the hard-milking cow is not likely to be profitable. To easy-going people, too good tempered to be profane, the temptation takes another form, that is, not to swear at the cow, but to stop milking her before all the milk is exhausted. Thus many a cow has dried up prematurely and never given her owner any profit, while if she had been an easy milker she had the capacity to become as good a cow as any in the dairy.—American Cultivator.



HOMEMADE LAND LEVELER.

elling lawns and gardens, or for doing grading of any sort. It is made from a plank, beveled on one edge, the edge being protected by a strip of sheet iron. Into this is set the framework that is shown in the illustration. Ash strips can be bent easily into shape for the handles, or old plow handles can be utilized.

A Valuable Object Lesson.
At a recent American Institute fair at New York City, the State Experiment Station made an extensive display of fruit, grown on the station grounds. There were 225 varieties of apples, each specimen having been selected as typical in shape, size, color, marking and general characteristics of the variety represented. The fruit was the result of the highest knowledge of culture and care and treatment known to the business. The collection was an object lesson in fruit lore of unmeasured value to those in search of knowledge in this special direction. This station is doing a double service in thus giving to the public exhibits of their work; first in testing the varieties and showing their merits, and second in giving an object lesson of their type and characteristics.

A Cheap Bag-Holder.
We glean the following idea from the "Farmers' Advocate": Take an inch board, three feet long by 14 inches wide, and slant it. Then take two slats, three inches wide and three feet long, and nail them upright to the board about five inches from the top, to serve as feet. Drive a wire nail through each corner of board, and turn them up a little to hook the bags on. Nail the board down at the bottom, and one man can fill and tie the bags as fast as two men can clear the grain.

Care of Wheat in the Fall.
If the late heavy rains have left any water standing in low places on wheat fields furrows should be run through these places, to take the water off or diminish its damage. Wheat will surely be killed wherever water freezes down to the ground over it. But un-

ally with the opening of frost the water sinks down to a lower level. If there is an underdrain near sometimes a sheet of ice will form over the water at night, and by morning all the water under it will have disappeared. In such case the wheat is benefited rather than injured.

Poultry Notes.
Chopped onions are beneficial if fed to your stock occasionally.
Squabs are ready for market as soon as they are well feathered just before they leave the nest.
Provide your poultry with a warm coop and a good scratching place if you want eggs in winter.
White Wyandottes lay brown shelled eggs as a rule. They are equal to Plymouth Rocks in this respect.
In order to secure satisfactory results it is customary to mate cockerels with hens, and cocks with pullets.
Never use kerosene on the body of a fowl. Lard alone is sufficient. All greasy substances will soil the feathers.

Sheep in the Orchard.
I have five acres that is partially covered with apple trees, some of which are quite old. For several years no crops have been raised on the land. For a few weeks in the spring it is used for pasturing cows, and during a portion of the summer and fall sheep are given the run of the field. They lie under the shade of the trees a greater part of the day, where a good share of their droppings is left, which seem to be a great benefit to the trees, and all wormy and defective apples are quickly eaten as soon as they fall. I now raise more and better fruit, and believe it will pay any farmer who has an apple orchard to keep sheep.—John Jackson, in "Michigan Fruit Grower."

Storing Vegetables in Basements.
Farmers who are fortunate enough to have barn basements miss the best advantage of them if they do not use the basement to store a great variety of roots and vegetables there, and thus reduce the house cellar of the unpleasant and also unhealthful odors from stored and fermenting vegetation. It is not hard to keep a deep basement free of frost all winter. If the basement is near the surface, a bank of earth outside enclosing an air space will keep frost out. In the very coldest weather a few corn stalks thrown over vegetables or roots or some loose blankets over these will protect them sufficiently.

Hog Lice.
I have been troubled a great deal to get rid of hog lice, and the best way I have found yet, that is a success, is this: (My pigs are not troubled with them so much in the warm weather as cold.) I put one-fourth kerosene oil and three-fourths water and a little sulphur, and, when I have a warm day in the winter, apply behind the ears and front legs, on the flank and root of tail. Give them a clean bed at the same time. After two or three applications I find the lice gone and pigs killed. I have no hog lice now, and my herd is in the best condition it ever was.—W. H. W., in American Swineherd.

Casting Farm Accounts.
Towards the close of each year the farmer should imitate other business men, take an account of stock, and estimate as closely as he can how he stands financially compared with previous years. Do not omit this because the account may not present so favorable a showing as you would like. Not to be willing to face facts is cowardly and unmanly, even though those facts seem greatly against us. Seed time and harvest do not fall to the farmer. He at least is sure of his living. If he be free from debt he is really the most independent citizen.

Corn Husks for Beds.
There is no nicer cheap mattress than can be made from dried shredded corn husks which every farmer can save while doing the fall husking. They are much cleaner and more durable than straw mattresses, and to most people more pleasant than the iron mattresses now so common, although where the bed has an iron mattress, it is likely to be the direct point at which lightning will strike when it strikes a house. We believe if farmers made more of their corn husks into mattresses, they would get well paid for their labor when people learned where they could be had.

Fall-Down Lettuce.
Lettuce is so hardy that a little sown very late in fall and slightly protected in winter will get an earlier start than it can if planted then. It is best to sow early enough to have the seed germinate in the fall, though early sown lettuce with pretty thick covering has wintered safely in winters moderately warm, or with plenty of snow to keep the lettuce covered.

Onions, Cabbages and Flats.
"You see, it's this way," he explained to the landlord, "I don't want to seem unreasonable, and I don't want to dictate what a man shall eat. I realize also, that you can't very well stipulate in the lease that a recognized article of food that is in good repute but has odor practically all over the country shall not be cooked on the premises. Again, I am prepared to concede that onions and cabbages are all right in the right place, but I feel that, in justice to myself and the neighbors, I must protest that a flat building on a warm day, when the windows are open, is not the right place, especially if the day be Sunday and the time about noon. I understand perfectly that you can't do anything as matters are now, but I rely upon your support when I introduce a measure in the council regulating the use of onions and cabbage in flat buildings."—Chicago Post.

Historians believe that the horse was first domesticated either in central Asia or northern Africa.