Campfire Tales

"GOOD MORNIN'."

He always said "Good mornin',"
An' emphasized the "good,"
As if he'd make it happy
For each one, if he could,
"Good mornin'!" Just "good mornin'"
To every one he met;
He said it with a twinkle
That no one could forget.

He always said "Good mornin';"
An' people used to say
That one o' his "good mornin's"
Clung to you all the day.

An' made you always cheerful—
Just thinkin' o the sound—
It always was "good mornin',"
'Long as he was around.

He always said "Good mornin',"
An' glad an' happy-eyed,
Those were the words he whispered,
The mornin' that he died,
Those were the words he whispered,
As cheerful as he could—
An' I believe the angels—
They emphasized the "good."

Tragedy of the Sunken Road

How Burnside's Men Were Shot Down at Fredericksburg

We are back among the memories of the civil war. The year is 1862. The month is December. Winter gives a keen edge to the winds. We are in a little city in Virginia, Fredericksburg. Its historical building is a house in which lived George Washington's mother.

It has three natural features of importance, the Rappahannock river, heights which are of very moderate elevation three-quarters of a mile back from the river, and at the foot of these hills is a narrow, depressed country way, a "sunken road," so-called. In what is going to happen, an awful tragedy, this cold month of December, 1862, the sunken road is of more importance than river or hills.

But look around you. On the other side of the Rappahannock, opposite Fredericksburg, is Falmouth. It might have been thought worthy of a name on account of its heights rising up near the river. Population could not have given it a name. In Virginia they have a way of naming a corner, hanging a title as a mantle on a few houses.

Think now of Falmouth, of the sleepy, muddy river, of the sleepy little city, of the hills, and especially of the sunken road. Have you a map of Virginia handy? Hunt up Acquia Creek on the Potomac, trace the railroad to Fredericksburg and then down to Richmond. How easy this plan looked in the campaigns of the great civil war!

That "sunken road," though. Did one think of that ghost hiding in that depression and having something to say about plans and campaigns, marches and attacks?

The Union army was reputed to have 120,000 men. It had a good cause and plenty of equipments. It was under a brave general, Burnside. He was not the greatest general that ever lived, but he had much merit as a commander. He was a soldier of energy. Then all the North wanted him to be as energetic as possible, and Washington clamored for a forward movement.

So the huge army, like a mighty stream, poured across the country and took possession of Falmouth. It spread out on all those heights. It posted its big batteries. It studied up a daring plan of attack upon the southern army over the river. It sent for the materials out of which to build pontoon bridges. When these were constructed, when across the river the army had been led, what opposition from an inferior army could block this northern advance?

Alas, that in ignorance they left out of the problem that element of the "sunken road," so closely identified with the solution!

But notice the movement on the hills rising up from the "sunken road." The southern army has stretched upon those hills a line of defence almost five miles long. They are reputed to have about 65,000 men. At their head is Robert Lee, a great soldier. One of his generals is "Stonewall" Jackson. He marches, he fights, he prays. The winning side in battle is likely to be the side he fights on. However, of more consequence than Lee or Jackson is the "sunken road."

The Union army will have no picnic in getting across the Rappahannock. In waiting for its opportunity the army feels the hard grip of the winter. An officer writes in his diary, under date of Dec. 7: "Very cold, plenty of snow. Men suffering; cold outdoors, ice indoors, in my room."

Something worse than the snow or the ice or the winter wind, sharp and cutting, is that "sunken road." What Union officer is thinking about that? Does any one ordering his men to clear the camp of snow and ice imagine that there is near the coming battlefield a trench-like way that will need clearing?

In the division of this grand army into corps, there are three, assigned to Gens. Franklin, Sumner and Hooker. They cover a stretch of three miles. Franklin is at the left, Sumner commands the center, Hooker will lead the right.

In the story left behind by a confederate officer, it is graphically told how the grim battle-era opens. It is an early hour on the 11th of December. Lee's army is stretched along those Fredericksburg hills a distance of almost five miles. The lonely sentry is pacing his chilling beat. Among the sleepers how few are dreaming that they may be near the sleep that knows no waking.

Suddenly the crash of a cannon goes echoing from hill to hill and up and down the icy Rappahannock. "Wake up!" cries a southerner, springing out from the folds of his blanket. "Wake up!" "What's that?" There are those in Lee's army who know. If a second gun bays out in the dense night shadows, it means a signal from the New Orleans Washington artillery that the Federals are getting ready to cross the river. The signal comes at four o'clock. The Union army is moving toward the arena of battle.

As said above, they are divided into three corps, under three brave, experienced officers. Gen. Franklin is at the left. Gen. Sumner commands the center. Gen. Hooker, on the right, has before him a path bloodier than any he anticipated. The left of the army has little trouble in crossing the river.

It is at Fredericksburg itself, in the street by the river, in the houses that line the unambitious way, that the Federals find a terrible wall of hostile fire confronting them. Gen. Barksdale and his Mississippians are behind that wall, and the Federals, trying to lay their pontoon bridge, drop before the Mississippi rifles hopelessly, as the leaves on the Fredericksburg forests, when October charges upon them.

There is a fire from the formidable Union batteries, to force Barksdale and his men out of their hiding place, and they will stubbornly fall back, but not yet. Meanwhile the 7th Michigan and the 19th Massachusetts rush forward in their boats, poling from shore to shore, though the bullets rain down wounds and death. They land. They press into the town. Many are doomed to sacrifice.

In the street, there in the hottest collision, is the Rev. Arthur B. Fuller of Watertown, Mass. He sought a chaplaincy, resigning from his parish to get it. He resigns his chaplaincy this morning that he may get quick access to an altar. His soul feels the heat and sweep of a flame of devotion consuming him. The chaplain's altar is in the very center of conflict.

He seizes a gun. He goes into the ranks as a private. He is one of the first to volunteer to dare the passage of the Rappahannock. He gains the bloody street. His rifle is ready. The crack of another rifle is heard, and Arthur B. Fuller of Watertown falls in the crimsoned way. The altar-flame has done its work.

The 13th of December comes. It is to be the saddest day of slaughter. On the left, in Franklin's corps, Gen. Meade almost pierces the Confederate line. Unsupported, he is forced to fall back.

The dead lie in far-stretching, silent heaps. On the Federal right the lightning from the thunder of the Confederate army is still more serious.

The 13th is a foggy morning. There is a deep veil of mist between the town of Fredericksburg with the northern army and that southern army on Marye's hill, Willis hill, Lee hill and kindred heights. The fog lifts, though, in the forenoon, and the Federals proudly advance in their march against the bitterness of death.

The lifting of the fog is only the rising or the curtain on one of the most serious, disheartening, cruel tragedies of the civil war. It should be said that the project of this advance has not been heartily welcomed among the officers of the army. There has been a strong blast from a wind called public opinion roaring "On to Richmond," and the army is obedient to the controlling will at its head, responsive in its turn to that unreasoning pressure of public sentiment. Let us keep this distinctly in mind.

The northern regiments are now marching out to martyrdom. In long, clean, bright lines they come steadily on. Their colors are proudly defiant. Their attitude is a challenge to the grave.

There is a flash along the frowning hills, there is a roar, and the southern balls make deep furrows in those advancing ranks. They will not turn, though. They press on, when suddenly, to their surprise, like specters springing up through the last of the morning mist, like gnomes wriggling out of the ground, rises a long line of waiting rifles in the "sunken road."

They hurl wave after wave of fire and ball, to which there can be no hopeful resistance. Broken, crippled, the bluecoats fall back in utter repulse. As their lines fill up, they come again, only to be broken, crippled, defeated again. They keep coming, but up out of the sunken road flash the fires of the hidden rifles, and every time the charge is in vain.

Finally in the sunken road are four lines of troops. The front rank, delivering its fire, falls back. The second fires and other ranks follow. No matter how brave, what advance could withstand those repeated deadly fires?

The sun has gone down on the crimson snow when the last charge is made. It is only an assault that is an invitation, and the answer is a slaughter. The horrors of the battlefield that night, the sufferings of the wounded amid the wintry cold, the discomfort of troops bivouacked out under the chilling heavens, cannot be described.

The Confederate losses reported are: Killed, 608; wounded, 4,116; Union killed, 1,284; wounded, 9,600.

The desire of Gen. Burnside to retrieve, the next day, his sad losses, and to lead in person another charge, finds fortunately no encouragement, and the Fredericksburg chapter of the war is closed.

Popular G. A. R. Comrade

Soldier of Pennsylvania With Great War Record

William Emsley was born January, 1841. He enlisted August, 1862, Company F, One Hundred and Sixteenth Pennsylvania Volunteers, Col. D. Heenan, Irish Brigade, First Division, Second Corps, Army of the Potomac, and enjoys the record of never having had a day's sickness nor of having missed a duty during his service of three years; he was in every skirmish and battle in which the One Hundred and Sixteenth was engaged; was promoted to sergeant and commissioned lieutenant.

Comrade Emsley is one of the best known men in the citizenship of Philadelphia and of Pennsylvania, and his continued membership in the Grand Army of the Republic and his devoted attendance for many years at department and national encampments have made him hosts of friends wherever members of the Grand Army are known.

Valuable Civil War Document.

Senator Clark of Montana has been given the opportunity to purchase the original of a pass which President Lincoln wrote in his own hand permitting Gen. Singleton to go through the Union lines to Richmond near the close of the war. Gen. Singleton lived in Quincy, Ill., and was a sympathizer with the South during war times. He was a unique character who is well remembered by the older citizens of the Sucker State. Although an outspoken opponent of the war, Gen. Singleton was a warm friend of Lincoln, who had a high regard for him, and willingly gave him the pass to Richmond, notwithstanding his opposition to the Union cause.

Horticulture

The Crisis with Nursery Trees.

It is something of a science to transplant trees that have been received from a distant nursery and have them live. It used to be thought that there must always be a large percentage of loss anyway—even under the best conditions. Both the nurserymen and the planters have now learned that trees of all kinds can be handled in a way to insure their living when placed in their new locations. A well-packed tree has its roots kept moist by being rolled in damp moss and tied up in bagging. The old scheme of pulling trees out of the ground, exposing their roots and sending them away without any protection was the cause of many a tree proving a failure. When these trees arrived at the distant station they were thrown out on the platform and left there exposed to the heat of the sun and the drying effects of the wind. In the course of time the purchaser drove around and got his consignment, perhaps a couple of days after their arrival. By that time their roots were good and dry. He drove home and set out his trees in any old way. Even had he set them in the best possible way it is altogether likely that a good many trees would have perished owing to the drying out of the roots. When a large part of his trees failed to grow of course the nurseryman was to blame—so the buyer said. He was right to some extent, in that the trees were sent away with roots not properly protected. In sending trees long or short distances the roots and their moisture supply furnish the key to the situation. Proper treatment of the tree from the time it comes out of the nursery row to the time it goes into the place assigned to it in the orchard will insure a good healthy tree. In setting a hundred of these there need be no failures.

Points on Asparagus Culture.

When the asparagus plants come up in the new bed they should be given every opportunity to grow and make leaf, for the leaves are what must be depended on to develop root. The fact that the roots depend on the top should not be forgotten. Constant pruning of the top does not increase the roots, as some might suppose. All the material that goes to the extension of the roots first goes into the leaves and is elaborated, that is, changed into a form that can be used in cell construction. The ground must be kept free from weeds and from hard crusts. Every encouragement should be given for the formation of top, and this should be continued till the berries form and turn red. Then the tops that have the red berries should be cut off or the berries picked off and thrown away. The berries should not be permitted to form seed, for that will take much substance from the roots. Moreover if the berries are permitted to stay on the plants they will fall to the ground when growth is done and the next year multitudes of little plants will start from them. This is the cause of many a bed running out or the stalks getting smaller. There will, however, be a good many other tops than those with berries and these may be permitted to remain. The water should not be permitted to stand on the asparagus bed but should be drained away from it, as the asparagus plant is very susceptible to rust and other fungous diseases.

Spraying to Thin Fruit.

Trees sprayed at the time they are in bloom will not set as much fruit as those sprayed either before or after blooming. The pollen that is struck with any sprays of common strength is doomed practically. It may put out a feeble effort toward germination. When trees are sprayed in blossom of course the pollen in a good many flowers escape, for the reason that all flowers do not open at the same time and many will not have opened sufficiently to receive the spray. It has been suggested that this is a good way to thin the fruit on trees. The suggestion has been entertained by scientists, and if it is ever put into practice it may result in the finding of an easy method of thinning. At the present time thinning is not generally practiced on account of the immense amount of work required and because at the end of the season the added value of the apples is almost offset by the cost of thinning. Men dislike to do work that gives them no gain. In the case of peaches, thinning pays even when men have to be employed to do the thinning. There is one advantage in attempting to thin by means of killing the pollen in some of the blossoms, and that is the irregularity with which the fruit would set. Hand work does the business in the most approved fashion leaving the fruit at regular intervals. No experiments that we know of have attempted to prove the value of spray as a thinner of fruit.

Fruit in Michigan.

According to reports, the Michigan fruit crop is going to be a good one, taking all things together. Some kinds will be short, but the aggregate will be good. Peaches promise less than any of the other fruits, and are estimated at two-thirds of a normal crop. This in reality is a good crop, for there are no years when all localities have normal crops. Cherries seem to lead the list in promise of yield. Apples come next and will without doubt be a very fine crop, a condition that will be welcomed both by the apple growers and by the multitudes of consumers that have been going without apples for several months. Pears also promise well, as do plums and small fruits.

Pasturage in Porto Rico.

Shipments of 1,500 head of cattle are made yearly from Porto Rico to Trinidad, St. Lucia and Barbadoes for the English government, and about 800 head to Martinique and Guadeloupe. Prices of 8 to 10 cents per pound on the hoof are obtained, less 42 per cent discount. The grazing on the island is unsurpassed, there being 130,000 acres of blue grass of the finest growth, equal to the celebrated grazing lands of Kentucky. Cattle raising as an industry can be largely increased in Porto Rico, and to great pecuniary advantage, as the market is practically unlimited. The demand from the numerous adjacent islands alone is far greater than the supply.—Porto Rico Agricultural Journal.

That population of London increased during the last century nearly fivefold.

Poultry

Place for the Incubator.

Under most circumstances a small building out of doors is the best place in which to locate the incubator during the time it is to be in operation. This place is necessary as a safeguard against fire. There might be times when it would be more advantageously located in the house were it not for the danger from fire. The objection to an outer building, however, lies in the fact that the temperature is very changeable unless the building is exceptionally well built. Where a good many chicks are to be raised or where several incubators are to be kept in service for some months at a time a building constructed partly below ground is best. We have seen such houses that had been constructed at a moderate cost. The lower walls went five or six feet below the surface of the ground, and consisted of concrete to the thickness of a foot or more. In such cases the floor was of concrete and the second floor of boards was only a short distance above the ground. The upper portion of such building can be used for the storage of food and the like. The lower part, in which are placed the incubators, can be kept at a very even temperature. The cellar of the residence is hardly the place for incubators, on account of the dampness of the cellars as ordinarily constructed, and the danger of fires above mentioned.

Cornish and Indian Games.

The Indian Game has many fine qualities to recommend it to the breeder, and for many years past has been one of the most popular of fowls. In plumage the male is green-black without penciling; the wings, chestnut, with bay and metallic black wing bar; the feathers of the neck hackle are short and hard, green-black, with delicate crimson-brown shafts. The plumage of the hen is very difficult to obtain in accord with the standard, and should be a combination of nut-brown and green-black throughout, green predominating. Along the breastbone of both male and female the feathers part and allow the skin to show just at or above the upper part of the keelbone. This is a distinctive feature of the breed, and shows from the time the chicks shed the down.

Cornish Indian Game hen.

Strength of Ancestry.

To have a strong breed of fowls we must have birds bred up from strong ancestors. In our present knowledge of the different breeds we cannot tell just what the comparisons between the different breeds are in this respect. Doubtless as time goes on we will have tests to discover these relative facts. There is a strong impression that one breed is much stronger than another breed, but we have no definite data to back up these rather vague impressions. In a small way we can tell something about the strength of ancestry in individual strains. Thus, if we have had in our flocks rather weak birds and have permitted them to reproduce themselves and have seen the same weakness in their progeny we know that the proper strength is lacking for the development of a proper strain of valuable birds. The best we can do is to watch these birds and weed them out of the flock. If we cure a sick bird, that bird should never again be permitted to lay eggs for hatching purposes. The very fact that she has been sick makes it probable that she lacks in hardiness.

Turkeys with Cramped Feet.

From Farmers' Review: My young turkeys have cramped feet. Can you tell me the cause and remedy for it?—A Subscriber. * * * Doubtless the cause is the cold and damp weather we have been having. Perhaps the poults have been permitted to lie in damp places and have thus become afflicted with something after the nature of rheumatism. We have had chicks affected that way by the causes named. In case of chicks we have found that taking them into the house where it was warm and dry insured a cure in a few days. Doubtless the same will be true of the poults.

Feeding Chicks.

From Farmers' Review: After chicks are hatched I do not feed them anything for 36 hours nor do I give them any water. After that I feed and water them. I feed and water four times a day while they are under five and six weeks of age. After that I feed three times a day. I have used this method for the last two years and find it the best I ever tried.—Mrs. E. I. Reynolds, La Porte County, Indiana.

Japanese Bantams were imported from Japan, where they have evidently been bred for a long time, as they breed very true to type. Only after long generations can a type be thus fixed. They are easily acclimated and hardy.

Corn Culture.

From Farmers' Review: In a recent issue of the Farmers' Review I saw an article by Dr. L. M. Ayres, in which he said that the farmer should give his corn crop shallow culture in a wet season and deep cultivation in a dry season; but he does not give the reason for it. I will say: Give deep culture in a wet season to let the water down and warm the ground. In a dry season, give shallow culture to hold the moisture that is in the ground. That will create a dust mulch, which will draw the water to the surface.—Joseph Blagden, Oklahoma.

To those to whom home is a prison, virtue is a penance.

The Dairy

Tuberculosis a Grave Matter.

The Storrs Experiment Station has been carrying on for a number of years some tests with cows known to be tuberculous. The results are given in bulletin 23, which closes with the following summary:

The development of tuberculosis in the condemned cows, although slow, continued gradually, until at the end of four years three of the four cows were practically worthless, either for milk production or for beef.

The results of experiments with these tuberculous cows and the use of their milk for feeding calves coincide with the general results of European observations, and indicate that the danger of the spread of tuberculosis through the milk of diseased animals is not so great as has often been supposed. In the earlier stages of the disease, and when the udder is not affected, the danger from the use of the milk appears to be limited. But when the udder is affected, or when the disease is so far advanced as to be indicated by outward signs or marked physical symptoms, the infectiousness of the milk is increased, and the danger in using it is greater.

It is not to be understood, however, that the farmer may neglect any case of tuberculosis in his herd that happens to be not in the advanced stages, or if the udder of the cow is not affected. As a matter of fact, it is practically impossible for him to tell when any animal that reacts to tuberculin may acquire tuberculosis of the udder. There is danger enough in the fact that the cows may acquire the disease from one another at all, no matter how likely or unlikely they may be to do so. Therefore, if the farmers do not want their dairy industry menaced and perhaps seriously injured by the wider spread of tuberculosis among their herds, it is of the utmost importance that each one use every effort to free his herd from the disease.

Cows should be examined carefully for physical symptoms of the disease and be tested with tuberculin, and any that respond at all should be looked upon with suspicion. Whatever disposition is finally made of those that are diseased, they should be kept at all times completely separated from those that are not, and the non-affected animals should be carefully watched and be tested with tuberculin at least once a year. Only in this way can new cases be discovered in their earlier stages. Unless the farmers can be brought individually to appreciate the gravity of the matter to themselves and the menace to their industry, and to take measures for destroying the disease in their own herds, the history of bovine tuberculosis in Europe, where in some regions the greater portion of the cows are infected, may easily be repeated in this country.

A Move for Pure Milk.

Pasteurized milk in sealed bottles, prepared and inspected under the direction of the city health department, will be furnished during the summer in the congested districts of the Northwest side, Chicago, by the Northwestern University Settlement. Five stations in the Sixteenth and Seventeenth wards will distribute the milk to flat and tenement dwellers at a rate slightly exceeding the price paid for ordinary milk. The first delivery will be made within a week.

By offering cleansed and tested milk to the residents of the crowded Polish district the workers in the university settlement hope to check the enormous death rate among children on the Northwest side during the hot months. The blocks surrounding the settlement, Noble and Augusta streets, were found in the investigation of the City Homes Association two years ago to be among the most thickly settled in the city, and the death rate is double the general Chicago rate of mortality.

The milk will be pasteurized in specially prepared quarters at the settlement, and will be sent out to all the substations each day for distribution. The milk will be inspected twice a week by the city health department. At first the milk will be sold only at the stations.

The health conditions in the Polish district have been such as to urge the workers in the Northwestern University settlement to immediate action. In the crowded neighborhood of the upper Seventeenth ward and the lower Sixteenth, the residents are far from a park or a public playground. Lincoln, Humboldt and Union Parks are all blocks away from the district. None of the new breathing spots are near the crowded quarters of the Poles, and there are no available public baths. The children live in the streets and alleys where grass spots are few. The Northwestern University settlement looks for no financial reward in carrying out this plan, but will furnish good milk, thoroughly cleansed, at actual cost.

Chicago Milk Campaign.

Again the milk inspectors of Chicago have begun an active campaign against waterers and skimmers of milk. In the past the spasmodic efforts of the milk inspection department have resulted only in spasmodic indications of virtue among the venders of milk. The present effort will doubtless result the same way. The trouble is not with the milk inspectors but in the conditions that make it impossible to keep at work enough inspectors to thoroughly do the work belonging to their office. All kinds of tricks are worked against the inspectors. One of the most common ones is to label all of the milk "skim" whether it be whole or skimmed milk. Then the dealers sell the milk that has been robbed of a part of its cream as "good" milk, by which the customers understand "milk that has not been skimmed." When the inspector comes along he finds the cans all labeled "skim" milk and so the man that has been really selling skimmed milk for whole milk is beyond prosecution. To the present time no check seems to have been found on this trick. Some have proposed that a law be passed to prevent the sale of skim milk except in considerable quantities, but this would certainly militate against both the producers and the consumers of milk. A considerable number of milk dealers are being prosecuted and their names published in the papers, and this is expected to have a salutary effect.

A tablespoonful of kerosene added to four or five quarts of starch will make the colored starched clothes iron easier.

Live Stock

Points on Angoras.

A raiser of Angora goats says: Goats have cattle diseases more than sheep diseases. They never have inflammation of the mucous passages, and seldom have foot rot. They never have scab, but are frequently lousy. I have often read about putting a few goats with a flock of sheep as protection against dogs. Dogs kill goats but not so much as sheep. I have never had any old ones killed but have had quite a number of kids killed by dogs. Goats are somewhat harder to fence than sheep, but not so hard as hogs. Goats do not jump, but climb and creep. I have old-fashioned rail fences that turn goats perfectly. If a rail fence is made to lean from the goat he will climb it, no matter how high it may be, but a well built rail fence three and a half feet high, will keep goats perfectly. A seven wire fence, properly spaced, will turn them perfectly. Two feet of woven wire and two wires above is perhaps the best. Goats bear flocking much better than sheep. In the range countries they are generally kept in flocks of from one thousand to four thousand.

I read often of the necessity of an infusion of new blood into our American flocks by importing from Asia. I have serious doubts if Asia has as good Angoras as the United States. The people of that country do not select and breed with any care. I believe that we have already in this country Angoras from which a most superior animal may be produced by American ingenuity in selecting and mating, as has been done in the case of the American Merino sheep and the standard bred horse. While I am not averse to the introduction of new blood, I do not want it of an inferior quality.

Little Things About Incubators.

There are some things that seem little in themselves that are of considerable importance in the running of an incubator. The advice is given not to buy second-hand incubators. Probably the advice is good, for a second-hand incubator may have been so badly handled that it will give unsatisfactory results in the hands of a new user, especially if the new user be a person that has had no experience with these machines. It is claimed that incubators, like other things, wear out. Without doubt this apparent wearing out is due to the maladjustment of the parts or utensils in the parts. How much warping and shrinking has to do with the so-called wearing out of incubators we cannot tell. It is claimed that in the case of too much moisture being used the machines will warp. This use of too much moisture is a little thing, but it must be looked after. It is a mistake to use any but the best kind of oil in incubators. A few cents saved on oil may mean the loss of an entire hatch. Least of all does it pay to buy cheap thermometers. There is little difference in cost between the good and poor thermometers. We have seen some of these articles sent out from houses for advertising purposes that were entirely worthless. One thermometer that we knew of seemed to work all right for a few days, and then dropped down to 46 degrees below zero and staid there. A thermometer that registers a few degrees out of the way may result in large losses of eggs and time, to say nothing of the patience of the poultryman.

Various Horse Feeds.

At the North Dakota Experiment Station tests with various feeds for horses led the experimenters to draw the following conclusions:

1. Brome hay gave as good results when fed to work horses as did timothy hay.

2. Oat straw was satisfactorily used for feeding horses which did light work and for those which were idle. One-fourth more grain was required to support horses doing light work when they were fed straw.

3. Barley was not equal to oats in feeding value per pound, but was nearly as good. Mules did not relish barley.

4. Malted barley was not so valuable for work horses as oats and was not equal in value to the dry barley from which it came.

5. Corn fed in connection with oats in the proportion of 100 pounds of corn to 125 pounds of oats, had greater value than cats; 77.5 pounds of corn equaled 100 pounds of oats when fed to work horses.

6. Whole wheat fed alone was an unsatisfactory feed for horses. Wheat ground and mixed with bran in the proportion of two parts of wheat to one part of bran by weight gave good results.

7. Bran and shorts mixed in equal parts by weight, was equal to oats in feeding value.

Law Against False Brands.

False brands of dairy products have always played a large part in frauds perpetrated in the sale of butter and cheese. It is of interest to know that a bill to prevent such practices is now before the National Congress and stands a good chance to become a law. It is known as the "Sherman Bill" and is for the purpose of preventing the branding of butter and cheese otherwise than from the territory in which they are made. Thus, at the present time, "Elgin butter" comes from all parts of the country. If any one section of country builds up a reputation for good products, other localities at once begin stealing that reputation and profiting by it. This is a mean kind of robbery that needs to be done away with. In the end it brings into disrepute the products from all localities, for it causes doubt as to the value of any kind of brand. In New York the state department has been trying for years to execute laws relative to this matter, but has always found the non existence of a national law in this regard a great obstacle in its path.

Ventilation in the cow stable is a necessity if the health of the animals is to be conserved. Little is known among the generality of cow owners as to the scientific principles of ventilation. The subject is worthy of study, especially by the men that are to construct stables. The men that have stables should investigate with the object of putting in a perfect system of ventilation.

The number of lepers in the Philippine islands is estimated at about 12,000.

THE CUNNING MOSQUITO

Writer Insists the Insect Is Showing Remarkable Educational Progress

"The man who believes that the mosquito cannot be educated up to the point where he is capable of dodging some of the artifices of human kind is simply a fool," said a man who has been paying some attention to anopholes and culex, and whose devotion has been returned with quadrupled amorousness, "and I know what I am talking about, for I have had occasion to observe a few things within the week, in substantiation of which I make proffer of various red splotches on my face, neck and hands. Just outside of my door there is a cistern, one of these uncovered cisterns about which so much has been said and written. It is a great mosquito breeder and at night these humming desperadoes make a fierce charge into my room. The door, window and transom are not screened, but I have around my bed what is supposed to be ample protection in a good mosquito bar. For a while the bar was good enough. But it did not take any great length of time for the mosquitoes to learn a few things. One night—just a few nights ago—I was awakened by a humming sound and had noticed that my sleep had not been as even as usual. At first I thought the sound was made by a street car some distance from my room on the line which traverses the street on which I live. The truth gradually dawned on me that it was the drone of mosquitoes which had been in the habit of slipping out of the cistern and into my room at night. They were making a fierce attack on the bar, and I concluded that I would get up and make a little investigation—an after midnight study, as it were—of this winged assassin. I did so.

"I never saw so many mosquitoes before. They were mad, too. The fact that they had encountered the bar seems to have made them furious. They were buzzing like a nest of disturbed hornets. But what surprised me more than any other thing was the fact that several dozen had managed to get through and were actually on the inside, and had really begun to chew me. On the outside of the bar I found a perfect swarm. Some of them were fastened in the threads of the bar. They were trying to squeeze through the little holes of the bar, just as the others had done. Their long legs, or their wings, or some part of the body, had become tangled and they were hopelessly tied. Now how did they know how to get through these little places by the squeezing process? How did they know this was the only possible way to reach the food they wanted? I tell you the mosquito is capable of learning a few things, and he is being educated up to some of the artifices of human kind, and that's all there is to it."—New Orleans Times-Democrat.

THE OLDEST STOVE

Richmond, Va., Claims One Which Seemingly Should Rank With the Best

According to a Philadelphia newspaper the oldest stove in this country is at present on exhibition in Minneapolis, Minn.

From the description this old stove is something after the fashion of the one which we have here in our state capitol. It stands upon legs or end supports, similar to those of a sewing machine, only that they are about half as high and of much heavier casting. The total weight of the stove is 500 pounds. It is three feet long, thirty-two inches high and one foot wide, with a hearth extending in front. There is no grate in the bottom, the fire being built directly on the bottom of the stove, the heat passing from below the oven, back of it and over the top of the pipe. The outside has scrolls and designs and crowns in relief, much after the fashion of the stoves of to-day, and on both sides cast with the metal are the words, "Hereford Furnace, Thomas Maybury, Mfr., 1767." We are assured that the stove is well preserved, in spite of its age. The surface has a finish which is techincally known as "pebbled."

The famous Virginia stove also stands upon legs, is about seven feet high and is handsomely ornamented. It is "three stories" high and of pyramidal shape, and was made in 1770 for the house of burgesses at Williamsburg, whence it was removed to Richmond when the seat of government was removed hither. The founder, one Buzaglo, whose place of business was in England, wrote of the "warming machine" that "the elegance of workmanship does honor to Great Britain. It exceeds in grandeur anything ever seen of the kind and is a masterpiece not to be equaled in all Europe. It has met with general applause and could not be sufficiently admired."

So, notwithstanding its advantages of a few years in age, the Minneapolis stove must pale its ineffectual fires when compared with our big, highly ornamental and aristocratically connected (historically speaking) old warming machine.—Richmond Dispatch.

Traveling and Wandering

Jones was in peculiarly expansive humor the other evening. He was packed up for the summer, and was starting off in the morning on a cheap racket walking trip. To traverse the country districts of New England was his program, and an unfailing friendliness his method of getting about cheaply and well.

"I have no use for traveling," he began.

"That, of course, is why you are starting off on the morrow?" I asked.

"That, dear friend, is not traveling. It is wandering, and I recommend the world in general to get back to it, as the ideal manner of getting about. Traveling is a distinctly modern invention. It aims at two things—speed and the attainment of a definite locality. It is done for a purpose, and the means are always sacrificed to the end. The scenery through which the victims of the system may steam, is blurred. Cards and papers are found necessary to slay the time, and when the travelers dismount from the deck or platform they breathe out a thankful 'Here at last,' as if that were the point. The ancients got about in a different spirit. They wandered where 'sweet adventure called them.' They merely roamed, setting themselves no goal. They were not whirled in hot compartments from point to point. Under the wide and starry sky they tented; these fine old tramps, Arabs, gypsies and all nomads of the Ulysses type. The peripatetic hoboes should organize a great league to prove that scenery is better than speed, and that every foot of the open road is as good as the place named on the guide post, toward which the wanderer's face is set.

"And no epitaph is more appropriate for the mundane wanderer than this:

"'Under the wide and open sky,
Where he loved to live, there let him lie;
Home is the sailor, home from the sea,
And the hunter is home from the hill.'

HIS JOKE COST HIM DEAR.

An Interesting Little Story About Hannibal Hamlin.

"Why don't you comb down that cowlick?" said Senator Mallory, laughingly, to one of the pages, whose hair was standing straight. "Some of these days your wife will take hold of it and pull your hair."

The boy glanced up at the senator's very bald pate. "Senator," he asked, "is that the way you lost your hair?"

There are quite a number of senators with bald heads. Senator Stewart is among the number. And Mr. Stewart says that it does not pay to make fun of a man who hasn't any hair on the top of his head, in the place where the hair ought to grow, as the old song says. In proof of which he tells an interesting story on how Hannibal Hamlin was defeated for the senate.

"Up in Maine," said Mr. Stewart, "there was a man who was very bald. One day Mr. Hamlin came along and tapped the man's smooth skull. 'I just want to tell you,' he said, 'that one of your two hairs is crossed with the other.'

"The remark was made only in fun, but the bald-headed man never forgot it. Long afterward he was a member of the upper branch of the Maine legislature and Hamlin was a candidate for the United States senate. Hamlin was defeated by one vote, and that one vote was cast by the man who was bald."—Washington Post.

NEW TRANSVAAL STAMPS.

King's Head Replaces Boer Legend—Orange River Coat of Arms.

While peace negotiations were pending in South Africa, the new colonial government went ahead just as if the war was over and the territory already at peace. The Transvaal government issued a set of postage stamps, which are in great demand by collectors. There are ten varieties, each of a different color, ranging in price from one cent to $2.50.

All of the stamps bear the head of King Edward, facing to the left, in an oval within a finely beaded frame, in gray black. Above the head is a crown and at the foot the word "Transvaal." The one-cent stamps, are a bluish-green, and the colors of the others range from a scarlet to orange, olive green and purple.

The British Colonial Office, meantime, is considering a new coat of arms design by Lockwood Kipling, father of the poet and novelist, for the new Orange River Colony, which was formerly the Orange Free State. The coat of arms consists of a plain heraldic shield bearing an orange tree and above it a Tudor rose; on the ground are waved lines, the symbol of water, typifying the name Bloemfontein. Two springboks support the shield.

Died on Devil's Island.

Only the other day there died on Devil's Island, the French convict settlement off Cayenne, the man who invented and patented the telegraphic system now universally adopted in France, and known as the multiple transmission system. Victor Nimault, twenty years ago, was an electrical employe of the French telegraphic service. In 1871 he discovered and legally protected a system of multiple transmission, on which he had been busied for years. Almost coincidentally a M. Baudot (not an official) invented a somewhat similar apparatus. This M. Baudot, being a personal friend of M. Raynaud, the director of the telegraphic department, found favor with that gentleman, and the Baudot system was finally accepted and universally adopted as the better of the two. Victor Nimault brought action against M. Baudot and M. Raynaud, and, after losing lawsuit after lawsuit, fired at and mortally wounded M. Raynaud. The unhappy inventor was tried, sentenced to imprisonment for life, and in due course was sent out to Cayenne. Twenty years having elapsed, he was recently pardoned by President Loubet. A subscription made by his friends in France left by the same boat which took out his pardon. But it arrived too late, for Victor Nimault, who had been ill for some time, died the day before port was made. The irony of it all is that poor Nimault's system has been in use in France for many years now; for, after he was sentenced, it was found to be preferable to the one adopted and approved by Raynaud, the then director of the telegraphic department.

A Lynn (Mass.) firm made a shoe in thirteen minutes.

The course of true love never runs smooth and in after years the bachelor is often glad of it.