FARM, GARDEN AND HOUSEHOLD.

Winter Feed for Cows.

For high-colored, sweet-flavored butter we have found that clover hay, cut when in early blossom and cured in the cock, without much exposure to the sun, is the best feed. The next in value is oats, cut when in the milk, and carefully cured.

Oats and corn, ground together, are good, and the Thorley Horse and Cattle-Food, mixed with bran and a little ground corn, we find excellent for increasing the flow of milk. Keep the cows in warm stables at night, and in stormy weather; if you expect to get much milk, salt the cows regularly and give them plenty of pure fresh water, which is indispensable for food milk and choice butter.—*Western Agriculturist.*

A Cure for Caked Udders.

A correspondent writes from Canada that when, as is often the case, one of the cow's teats becomes hard and difficult to milk, it may be cured as follows: Take a pint basin, put into it a small handful of cornmeal, add to it a teacup of hot water. Stir it until it is cool enough for you to hold your hand in; then bathe the teats by dipping them into the dish until the inflammation is out of them; milk gently, for the udders are tender, and put a little lard or linseed oil on the udder after milking. I think a trial of a few days will convince the most skeptical. Bathe that bunch with it, and, in addition, bathe with beef brine twice a day, and give liberal doses of garget and saltpeter. This is the best remedy for swollen bag after the cow comes in that I know of.—*Mirror and Farmer.*

Bitter Rot in Apples.

This disease appears to be on the increase, judging from the number of inquiries made concerning it. Light brownish spots appear in the flesh of the apple, and these are of the most intensely bitter taste, while the unchanged portions are of their usual character. If any proper investigations have been made as to the cause, we have not heard of them. Cases are recorded in which manuring the trees has been followed by a recovery. So far as is known at present, we can only work on general principles; assuming that there is a proper lack of nutrition, it is safe to see to the general health of the trees. On poor soils apply manure, and on those apparently fertile, give lime, or ashes, or both. Until the precise cause is known, to apply special remedies will be working in the dark. —*American Agriculturist.*

Fruit Growing.

Fruit culture is making rapid progress in the United States. According to recent official statements, the land appropriated to this branch of industry is 4,500,000 acres. Upon this there flourishes 112,000,000 apple trees, 28,000,000 pear trees, 112,270,000 peach trees, and 141,260,000 grape vines. The total value of the fruit crop throughout the United States is set down at $138,216,700, an amount equal to half the value of the average wheat crop of the country. Toward that large sum apples are held to contribute $50,400,000, pears $14,130,000, peaches $46,135,000, grapes $2,118,000, strawberries $5,000,000, and other fruit $10,432,000.

Harrowing Wheat.

Secretary Stratton, of the Colorado Board of Agriculture, in his report to Gov. Routt, among other interesting information, has the following in relation to harrowing wheat:

The practice of harrowing winter wheat in the spring of the year has obtained to some extent in the Western States; and reasoning from analogy, Mr. P. M. Hinman, of Boulder county, —a member of the Board—having a field of wheat which failed to have a good stand, and whose general look was every way inferior to the balance of his wheat, decided to harrow the field and notice the result. The harrow was faithfully applied when the young wheat was four to six inches high. Many of Mr. Hinman's neighbors, who witnessed the operation, were very free to express their opinion that the wheat would be ruined. Such, however, was not the case, as Mr. Hinman informed me that immediately after the harrowing the wheat took a better look, and commenced growing rapidly; and at harvest time the field so treated gave the largest yield.

Cultivate Flowers.

The following is from the pen of a lady in the *Rural New Yorker*, and is so full of sense and good advice that we give it place:

"Everything which tends to make us better and happier, to purify our lives and refine our tastes, should find a large room in our sympathies. I take it that it is the *duty* of every household to raise, at least, a few flowers. We need them for our children's sake, we need them for our friends, we need them to beautify our homes and make them attractive, we need them for festive occasions—and, oh! if the destroyer enters our dwelling and lays some loved one low, how their frail but beautiful forms send our thoughts heavenward and almost mitigate our grief.

Some of us live in old, or unpretending houses, with modest surroundings, spending most of our time in the kitchen, trying with cheerfulness to do our duty, and not counting the toil for our loved ones drudgery; but when we have gained the time to don our afternoon dresses and sit down to our sewing, how much pleasanter to rest our eyes on a plot of beautiful flowers than on a yard grown up to rag-weed and thistles, or perhaps grass left unmowed until the general haying, grown nearly waist high, forbidding any promenade about the house, save in the beaten paths! Some excuse themselves on the plea of want of time; but if they once try the culture of flowers, they will be astonished to see how little time it takes, and how, from year to year, their love for the occupation grows till it becomes almost a part of their being.

A collection of flowers may not be accomplished in one year, but a few clumps of perentials—of rose bushes, climber, flowering shrubs—set each season, will soon make a show of which we may well be fond and proud.

Butter-Making.

There are several reasons why winter butter is rarely as good as summer butter. The two principal ones are, first, the cows are usually not fresh; second, the feed is dry—nothing being equal to the sweet, succulent grass of May and June for producing fine, golden, first-class butter, and plenty of it.

The great difficulty, however, experienced in churning in winter over that in summer or late spring, before the dry heat of summer has set in, exists in the different temperatures of the atmosphere. In May and early June, when it requires the least labor to make good butter, the temperature of the atmosphere is about 70° in the morning a few hours after sunrise, which is the best time to churn. The milk, at that season of the year, is generally kept in a cool, airy room free from offensive and impure smells, and in consequence is perfectly pure and healthful.

The above simple reasons embrace the why and wherefore that May and June butter is superior to January butter. If your correspondent "Ellen R." will set her wits to work to secure the same conditions in winter which nature, almost unassisted, provides for her in the spring, she will compass the whole mystery—which is no mystery at all—of making good butter in the coldest weather in winter. Her cows must be fed with rich, wholesome food, or there will be but little butter in the milk, and that of an inferior quality. Food possessing a disagreeable smell or taste will impart its bad qualities to the butter.

In milking in winter great care sho'd be practiced in keeping every particle of filth of the stable or yard from getting into it. The milk and cream must be kept out of the kitchen and living room, and absolutely clear of all odors from cooking or smoke. A dry, airy cellar is probably the best place the majority of farmers have for a milk-room in winter. But if vegetables are stored in the same cellar, the place will, in all probability, be made as near air-tight as possible to exclude frost, and the odor which is constantly arising from vegetables thus stored will be absorbed by the cream, and the butter be permanently and incurably injured.

The cream and milk must be kept in an absolutely pure atmosphere of as even temperature as possible, until enough has been gathered for churning. The temperature should be kept above the freezing point, or of course the cream will not rise. Stir your cream twice or three times a day. Before churning keep the churn in a room where the temperature is not lower than 70°, for several hours, so that the wood may become thoroughly warmed through. Now remove the crocks or vessels containing your cream from the room where they have been kept into a warm room, and set them in a tub or large boiler of scalding water, and stir the cream to cause it to warm evenly until it is brought to a temperature of about 60°. If you have a thermometer you can ascertain this exactly, but if you cannot approximate it by feeling with the hand or tasting the cream, then turn the cream into the churn. Before this operation, however, the churn should be scalded and rinsed thoroughly, by pouring a pailful of hot water into it, and giving the dasher a few brisk turns, and after the hot water has stood a few minutes in the churn with the lid closed, empty, and allow the churn to remain open a minute or two till the temperature of the inside lowers slightly before turning in the cream. While churning keep the room comfortably warm and avoid cold drafts striking the churn from opening outside doors while the operation of churning is going on. Cream will churn easier if properly secured before churning, but it is much better to expend a little more labor and have nice, sweet butter, than run the risk of standing your cream in a warm room where it is exposed to the odors of the kitchen, which are sure to injure the butter more or less. Drain the buttermilk off and wash the butter with moderately cold well or spring water, pressing it firmly with the ladle. Do not mix and champ it, or the grain will be injured. Salt with one ounce of fine Liverpool salt to the pound of butter, and let it stand for two hours or more in a clean place where it will not get too hard to work, then work over by pressing with the ladle till the buttermilk is all expelled, and form into rolls or prints. Never use coarse salt, and always, if possible, the Ashton, or Higgin's dairy salt.

If these directions are followed intelligently, the young lady will have sweet, nice butter, that her husband will never tire of praising.—*Kansas Farmer.*

An Aquatic Anomoly.

The Peora *Transcript* reports the discovery of a strange animal which was lately caught in the Illinois River, near that city, by an old fisherman named Nick Ohl. "The animal belongs to the order of urodela, commonly spoken of as tailed amphibians. In some respects it resembles a lizard, but more closely the Mexican axolotl. It has, like the lizard, four short legs, with which it crawls about on the bottom of the river. The curious part of it lies in the branches of feathery-like processes attached to the outside of the body, just back of the head. There are no eyes, but the rudiments of eyes are plainly to be seen beneath the skin. One of these curious amphibians was caught in our river several years ago, and was sent by Dr. C. W. Greenleaf to the museum of natural history connected with the Central Park, New York, where it was justly regarded as a very valuable curiosity. In the Ohio River are found something of the same character as this, which goes under the various euphonestic titles of hellbender, mud-devil, ground puppy, young alligator, and fish salamander. The specimen before us is purely an aquatic "bird," and does not, like the water-newt, ever attempt to exist outside of its native element. The one before us is about a foot in length, and well preserved in spirits.

The works of a person that builds begin immediately to decay, those of him who plants begin directly to improve. In this, planting promises a more lasting pleasure than building; which, were it to remain in equal perfection, would at last begin to moulder and want repairs in imagination. Now trees have a vitality in them that suits our taste, and that is annual variety.—*Shenstone.*

A MARVELOUS DISCOVERY.

The Wonders of the Speaking Phonograph.

A writer in the New York *Sun* of Feb. 23d, gives some exceedingly interesting facts connected with the use of a new and wonderful discovery known as the Speaking Phonograph, by Prof. Thomas A. Edison. The writer visited the laboratory of Prof. Edison at Menlo Park, N. J., and below we give some extracts from his article in the *Sun*:

Prof. Edison was seated at a table near the center of the room. He looked like anything but a professor, and reminded me of a boy apprentice to an iron moulder. His hands were grimy with soot and oil; his straight, dark hair stood nine ways for Sunday; his face was entirely beardless, but sadly needed shaving; his black clothes were seedy, his shirt dirty and collarless, and his shoes rigid with red Jersey mud; but the fire of genius shone in his keen gray eyes, and the clean cut nostrils and broad forehead indicated strong mental activity. He seems to be always looking for something of great value, and to be just on the point of finding it. Unfortunately he is quite deaf, but this infirmity seems to increase his affability and playful boyishness. A man of common sense would feel at home with him in a minute; but a nob or prig would be sadly out of place. Though but 31 years old, the occasional gleam of a silvery hair tells the story of his application.

The Professor was manipulating a machine upon the table before him. He had something representing a gutta-purcha mouthpiece of a speaking-tube shoved against a cylinder wrapped in tinfoil, which he turned with a crank. The small end of a tin funnel was clapped over the mouthpiece, and strange ventriloquial sounds were issuing from it. He shook hands, and pointing to the instrument said: "This is my speaking phonograph. Did you ever see it and hear it talk?"

The reply was a negative. Thereupon he picked up the gutta-percha mouthpiece, saying, "This mouthpiece is simply an artificial diaphragm. Turn it over," suiting the action to the word, "and you see this thin disk of metal at the bottom. Whenever you speak in the mouthpiece the vibrations of your voice jar this disk, which, as you see, has in its center a fine steel point. Now for the other part of the machine. Here is a brass cylinder grooved something like the spiral part of a screw, only much finer. I wrap a sheet of tinfoil around the cylinder, and shove the mouthpiece up to it so that the tiny steel point touches the tinfoil above one of the grooves. I then turn the cylinder with a crank, and talk into the mouthpiece. The vibrations arouse the disk, and the steel point pricks the tinfoil, leaving perforations resembling the old Morse telegraphic alphabet. They are really stereoscopic views of the voice, recording all that is said, with ime and intonations. It is a matrix of the words and voice, and can be used until worn out. Now let us reset the cylinder, so that the steel point may run over the holes or alphabet made when we talk in the mouthpiece. The thin metal disk rises and, as the steel point trips from perforation to perforation, opening the valves of the diaphragm, the words, intonation, and accent are reproduced exactly as spoken. For instance, before you came up, I was talking to the instrument, and here is the matrix or stereoscopic view, if you please, of what I said," putting his finger on the tinfoil which still remained on the cylinder. "Now I reset the instrument," sliding the cylinder to the right. "Here the steel point starts at the same spot as when I talked through the mouthpiece, but its action is now controlled by the perforated alphabet. It repeats what I said. I use this sort of an ear trumpet to bring out the sound, so that you can hear it more distinctly. Listen."

He placed the small end of a funnel over the mouthpiece, shoved the mouthpiece against the cylinder, and turned the crank. The following words chased each other out of the funnel:

Mary had a little lamb,
Its fleece was white as snow,
And everywhere that Mary went
The lamb was sure to go—to go—to go
Ooh ooh ooh—ah!
Cockadoodle doo—ah!
Tuck—a—tuck—a—tuck
Tuck—ah! Tuck—ah!

The cylindar was again set back, and the crank turned very slow. The effect was ludicrous, for the Professor had originally pronounced the words with great gravity and dignity, and the drawling way in which the instrument repeated them would have made a horse laugh. The cylindar was then turned very fast, and the words flew out of the funnel so fast that they struck the ear in a confused mass. But a most extraordinary effect was produced when the Professor turned the cylindar backward. It said:

Go to sure was lamb the,
Went Mary that everywhere and,
Snow as white was fleece its,
Lamb little a had Mary.

All this with profound gravity, as if the fate of the world depended upon the accent and pronunciation. Mr. Edison then tore off the tinfoil and wrapped a fresh sheet around the cylinder. One of old Mother Goose's rhymes was murmured into the mouthpiece, and its alphabet pricked out by the action of the steel point. The cylinder was then reset, and the crank turned, with the following result:

Rub a dub dub,
Three men in a tub,
And who do you think was there?
The butcher, the baker,
The candlestick maker,
They all jumped out of a rotten potato.

The instrument is so simple in its construction, and its works so easily understood, that one wonders why it was never before discovered. There is no electricity about it. It can be carried around under a man's arm, and its machinery is not a fiftieth part as intricate as that of a sewing machine. It records all sounds and noises. The Professor blew in it at intervals, and the matrix recorded the sound and returned it. He whistled an air from the "Grand Duchesse," and back it came clear as a fife, and in perfect time. He sang a music hall ditty into the funnel. The vibrations were recorded, and, on resetting the cylinder, the tintinnabulatory sounds poured out soft and mellow. Mr. Edison coughed, sneezed, and laughed at the mouthpiece, and the matrixes returned the noises true to a die. But, most remarkable, the instrument sent back the voices of two men at the same time. To illustrate: The Professor, in a deep bass voice, recited in the mouthpiece the first verse of "Ringen on the Rhine." A matrix was obtained, the machine reset, the funnel placed in position, and the crank turned. The words came out as though some tragedian was endeavoring to affect an audience to tears:

A soldier of the legion lay dying in Algiers,
There was lack of woman's nursing, there was lack of woman's tears.
But a comrade stood beside him while his life-blood ebbed away,
And bent with pitying glance to hear what he might say.
The dying soldier faltered, and he took that comrade's hand,
And he said, "I never more shall see my own, my native land.
Take a message and a token to some distant friend of mine,
For I was born at Bingen—at Bingen on the Rhine."

While these affecting words were pouring out, the Professor shouted into the funnel several petulant exclamations. At the close of the verse the cylinder and its matrix were reset, interruptions and all, as follows:

A soldier of the legion lay dying in Algiers.
——"Oh, shut up!"——"Oh, bag your head!"
There was lack of woman's nursing, there was
——"Oh, give us a rest!"——
lack of woman's tears.
——"Dry up!"
But a comrade stood beside him while his life
——"Oh, what are you giving us?"——"Oh,
blood ebbed away;
——cheese it!"
And bent with pitying glance to hear what
——"Oh, you can't recite poetry!"——"Let
he might say.
——up!"
The dying soldier faltered, and he took that
——"Police! Police!"——"Po
comrade's hand,
——lice!"
And he said, "I never more shall see my own,
——"Oh, put him out!"——"Oh, cork your-
my native land."
——self!"

It is impossible to describe the ludicrousness of the effect. The Professor himself laughed like a boy. One of his assistants told a story concerning a trip laid for a well-known divine, who was skeptical regarding the capabilities of the instrument, and evidently had a suspicion that the Professor was a ventriloquist. He wanted to talk into the mouthpiece himself, and see if his own words would be recorded and repeated. A matrix was put on the cylinder that had been used once before. The Doctor repeated a scripture quotation, and, to his great astonishment, it came out as follows:

He that cometh from above is above all [Who are you?"]; he that is of the earth ["Oh, you can't preach!"] is earthly, and speaketh of the ["I think you're a fraud!"] earth; he that cometh from heaven is above all. And what he has seen and heard ["Louder, old pudding head!"] that he testifieth; and no man receiveth his testimony ["Oh, go and see Beecher!"].

The possibilities and capabilities of this remarkable instrument are wonderful. Dolls and toy dogs can be made to recite nursery ballads, and wax figures of notabilities can use the voice and language of their originals. A prominent showman has already taken steps toward the formation of a museum of wax figures similar to Madame Tussaud's in London. All the figures are to speak. Matrixes of the voice and words of a gentleman whose imitations of Edwin Forrest are astonishing, are to be secured and placed in the breast of a wax statue of the great tragedian. The voice and outward appearance of Mr. Forrest are to be perfectly copied.

"Why," says Mr. Edison, "Adelina Patti can sing her sweetest arias, and by this instrument we can catch and reproduce them exactly as sung. The matrixes can be copied the same as stereoscopic views, and millions sold to those owning machines. A man can sit down in his parlor at night, start his phonograph, and enjoy Patti's singing all the evening if he chooses. The same with Levy's cornet playing. A matrix of his solos can be produced, and a million copies taken, and Levy's solos and Patti's arias can be given ten thousand years from now as perfectly and accurately as when the great artists were alive. If the last benediction of Pope Pius had been taken by the phonograph, the matrix could have been duplicated, and every true Roman Catholic on the face of the earth might have heard the benediction in the Pope's own voice and accentuation. There was a fortune in it. The matrixes could have been sold at five dollars apiece.

A Deaf Man's Musings.

Go among great folks for great sinners.

It is good to be deaf when the slanderer begins to talk.

Love drifts into hate more easily than indifference into animosity.

"Just one little drink" has made all the drunkards in the world.

He is no true friend who has nothing but compliments and praise for you.

Many people find their only happiness in forcing themselves to be unhappy.

Sharp and intelligent rascals are more respected by the world than virtuous fools.

Half of the pleasure of riches consists in seeing others suffer the pangs of poverty.

To borrow a pocket knife and find it will cut is one of the pleasantest surprises of life.

When a religious society quarrels and splits, it stands to reason that the devil gets one of the divisions.

It is not difficult to do good, for the means are clustering about every man's lips and hands.

He is indeed an afflicted man who can pass a beautiful woman without for an instant forgetting his sorrows.

He who eats mince pie in a restaurant affords beautiful and touching evidence of child-like faith in his fellow man.

If you would secure the favor of an intelligent man cut off your story as soon as he smiles an understanding of its point.

The physical atributes of man are constantly at war with his moral and intellectual forces—notably in the case of boils.

There is no sadder moment in a poor man's life than when he takes together the last few grains of [illegible] bag of smoking tobacco. [illegible]

Tears at a funeral are sometimes a mere disguise for joy; just as laughter and gayety amid social festivities may mask a broken heart.

No man should be punished for his crimes who was trained to crime in his childhood. As well blame the young jockey for his bow legs.

Whatever may be the individual fate of women, nature proclaims aloud the one great object of their creation. Watch the little girls with their dolls.

A man's wedding day resolutions of reform are never trustworthy, because for a time the wings of his great happiness carry him high above all vicious influences. The hour of trial comes later.

Facts for Those Who Burn Kerosene.

Kerosene oil is one of the products derived from refining crude petroleum as it comes from the well.

The oil is always more or less dangerous, according to the amount of volatile gases left in it.

Every lamp filled with the fluid is liable to explode after burning several hours.

But no explosion will ever happen with the lamp full.

The danger comes from the constant generation of an invisible vapor in the confined space above the oil. This vapor, which is inflammable, is caused by the heat of the burner communicated to the oil; but it will not explode unless exposed to flame. The metal attachments on lamps often become 40 deg. warmer than the oil, which is itself sometimes as high as 200 deg. Hence kerosene, to be entirely safe, should be near 150 deg. proof.

But very little of the oil used is as good as this. Of sixty-three samples tested, only *eight* were found entirely safe. This will account for the terrible loss of human life from the almost universal use of kerosene oil. In the United States alone, last year, over 100 deaths per week were reported from accidents by kerosene.

A simple test is to place a tablespoonful of the oil in a saucer and apply a lighted match; if the oil ignites, it is unsafe, never use it. If it does not take fire it is not *necessarily* safe; because the temperature of the oil in the open air is not so great as in a burning lamp.

The only reliable test is one made by slowly heating some oil in which a thermometer is placed, constantly noting the number of degrees, and applying a lighted match, not to the oil, but to the vapor, if any, just above the surface. If the oil flashes below 120° reject it.

This flashing point is the temperature at which the oil emits an inflammable vapor, and depends upon the quantity of naphtha or gasoline in the oil. This point should always be higher than the temperature that the oil ever reaches in a lamp, which is often 100°.

Cautions.—1. Keep the metallic parts of lamps clean and the air passages open.

2. After a lamp has been burning for three or more hours at one time, never relight again till filled.

3. In extinguishing the light, turn the wick down quite low and allow a few seconds to intervene before blowing out the flickering flame, or better still, do not blow it out, but let it "flicker" out.

Glimpses of Lincoln.

So much has been written about Lincoln's private life and personal habits, that it seems unnecessary now to add more than a word. He was simple in all his tastes; liked old songs and old poetry. He was always neatly but not finically dressed. He disliked gloves, and once I saw him extract seven or eight pairs of gloves from an overcoat pocket, where they had accumulated after having been furnished him by Mrs. Lincoln. Usually, he drank tea and coffee at the table, but he preferred milk, or cold water. Wine was never on the table at the White House, except when visitors other than familiar friends were present. The President's glass was always filled, and he usually touched it to his lips. Sometimes he drank a few swallows, but never a whole glass, probably. He was cordial and affable, and his simple-hearted manners made a strong impression upon those who met him for the first time. I have known impressionable women, touched by his sad face and gentle bearing, to go away in tears. Once I found him sitting in his chair so collapsed and weary that he did not look up or speak when I spoke to him. He put out his hand mechanically, as if to shake hands, when I told him I had come at his bidding. It was several minutes before he was roused enough to say that he "had had a mighty hard day." Once, too, at a reception at the White House, I joined the long "queue" of people, and shook hands with him, received the usual "Glad to see you, sir," and passed on. Later in the evening, meeting me, he declared that he had not seen me before, and explained his preoccupation of manner while the people had been shaking hands with him, by saying that he was "thinking of a man down south." It afterwards came out that "the man down south" was Sherman. Once, when a visitor used profane language in his presence, he rose and said: "I thought Senator C. had sent me a gentleman. I was mistaken. There is the door, and I wish you good night." At another time a delegation from a distant State waited on him with a written protest against certain appointments. The paper contained some reflections upon the character of Senator Baker, Lincoln's old and beloved friend. With great dignity the President said: "This is my [illegible] which you have given me?" [illegible] that it was, he added: "To do with as I please?" "Certainly, Mr. President." Lincoln stooped to the fire-place [illegible] him, laid it on the burning coals, [illegible] and said: "Good day, gentlemen." —*Noah Brooks, in Scribner.*

Consolation—[illegible] here; what I say, is, [illegible] riches? 'Spose a [illegible] know—a [illegible] what's good of [illegible] drunk than he can [illegible]