

AGRICULTURAL.

Foot Rot in Sheep.

Foot rot is of two kinds, common foot rot, and contagious foot rot, the latter being much more difficult to cure and requiring longer treatment. Mr. Steward in his Manual gives the following mixture as a dressing to be used after paring and washing with carbolic soap and water:

Oxide of Copper 4 ozs.
Arsenic 1 oz.
Acetic Acid 3 ozs.
Honey 8 ozs.

To be applied by dipping tow or lint in the mixture and binding it around the tender parts, especially between the digits.

Another remedy is an ointment made of finely powdered blue vitriol one pound; verdigris, one half pound; linseed oil, one pint, and pine tar, one quart. This will dry on the foot and will not be as easily washed by the wet grass. In a recent number of the *American Agriculturist*, Dr. Thurber gives a method of treating sheep, which is quite popular in France, both for preventing the spread of foot rot and curing mild cases. Shallow tanks or trays are placed at the doors of the sheep barn, and the animals as they go out and in, bathe their feet in a liquid made by slacking quick lime in water. The tanks are ten feet long, and have slats nailed on the bottoms to prevent the sheep from slipping and falling all over into the caustic solution. The depth should be only enough to well cover the hoofs. Foot rot is much more common on damp soils where the shell of the hoof grows faster than it wears off. Paring must always be attended to in such localities.

Feed Growing Chickens Well.

In midsummer young chickens are growing more rapidly than at any other period in the year. They love the warm weather, if they are of the larger varieties, especially; and if they have rooming room they cannot well be overfed, because they find such a variety of insect and green food in the course of their daily journeys around the farm or country plot.

Their condition is quite different from that of adult or maturely-grown fowls. These may be overfed easily, and will put on fat eternally, to their discomfiture and detriment. But the young stock, in good thrift, convert what they eat into flesh, bone and muscle, and continue to thrive during the heated season upon all they will ordinarily pack away in their craws, particularly if allowed a variety of good provender.

Don't stint them, therefore, in feeding, but give them all they will eat up clean. Thus they will grow in stature and keep generally in good health. It is a mistake to underfeed the growing chickens. They require more solid food from the time they are three to six or seven months of age, in proportion, than at any time before or afterward in their lives. This fact is worth observing and remembering by all who aim to have the "best birds" in the succeeding fall and winter, annually.—*Poultry Yard*.

Sow Now for Spring Flowers.

While our gardens present a much greater variety than did those of a half century ago, there are some plants in which the old-time gardeners excelled. We do not see such beds of Pansies, or of Rocket Larkspurs, as were then the pride of the gardeners. Success with Pansies is mainly due to sowing the seed in autumn. If the seed is sown in spring, by the time the plants begin to bloom hot weather comes, and the flowers become fewer and smaller. In order to have the flowers in spring, sow the seeds early this month. Make a spot of rich soil fine, and level the surface by pressing it with a board. Sow the seeds, sift a little soil over them, and press down firmly with the board. When the plants are an inch high, transplant them to the place they are to flower. The plants are quite hardy, and all the winter protection they need is a little brush to keep the snow from pressing too heavily upon them. The Rocket Larkspurs are, unlike the tall ones, annuals. A bed of them is as showy as one of Hyacinths. Sow in a well enriched bed this autumn, but leave them to flower where they were sown. The bed may be covered with brush during the winter, and if the plants are too much crowded in any part of the bed next spring, thin them by cutting out the surplus. They do not transplant satisfactorily.

Autumn Care of Meadow Land.

Meadows should not be closely grazed at any time, and especially not in the fall. They need to have fertilizing materials added to instead of taken from the soil. Young animals are much more injurious than mature ones, while full-grown stock that are being fattened, and are fed rich grain rations, may by their droppings add materially to the fertility of the soil. Young-growing stock withhold a large share of the potash, phosphoric acid, and nitrogen of the food to build up their bodies, leaving the manure comparatively poor. On the other hand mature fattening animals need very little of these three chief elements of soil fertility. Aside from the loss of plant-food, the close feeding of stock on meadow land does mechanical damage. If the soil is soft, the feet of the animals injure it, and the close grazing pulls much of the grass up by the roots. Meadows, like winter grains, are injured by freezing and thawing, and the plants need to be in a vigorous condition in late fall, with a good growth of after-math for protection from the frosts, winds, etc. Well-rotted manure applied to the meadows as a top-dressing, will strengthen the plants and insure a fine crop the next season. This application is best when made soon after the hay is removed. Later in the season much of the soluble material is washed out of the soil by the fall rains. Quick acting manures should be used in the growing season, otherwise loss is sustained. Take good care of the meadows, for they suffer greatly if abused. They are easily and often injured by animals in late autumn.—*American Agriculturist*.

Buckwheat as a Farm Crop.

The albuminoids are less in buckwheat than in wheat; in fact, not much more than half as abundant, while there is a greater amount of starch and fat. Buckwheat is, therefore, shown by analysis to be more fattening and less strengthening than wheat. It makes an excellent feed for pigs and poultry. Many persons believe that buckwheat is not healthful, and causes skin eruptions. Several other members of the

buckwheat family produce powerful vegetable principles, and this plant may possess one such, though it is probably not harmful.

New York and Pennsylvania produce sixty-eight per cent of the twelve million bushels of buckwheat now grown in the United States. Only twenty per cent is grown outside of New England and the Middle States. The great fertile prairies and the vast South with its warm climate, are not favorable for the growth of this crop. Buckwheat does well in the hilly regions, where the soil is light and thin. It, in short, flourishes at higher altitudes, with a lower temperature, and under a greater rainfall than other grains.

One great merit of buckwheat is its availability as a second crop, thus replacing another that has been destroyed by frost, drouth, insects, or otherwise. It is also valuable as a weed exterminator. The infested land may be tilled until mid-summer and sowed with buckwheat, which by growing rapidly smothers the weeds. Another use is that of a green manure. It grows well on moderately poor land, and makes a large growth of straw, which rots quickly when plowed under, thus adding much vegetable matter to the soil.

Raising Early Lambs for the Butcher.

So far as my experience goes, there is no more trouble in raising an early lamb than a late one. In fact, our earliest lambs are almost invariably our best lambs. I would rather have lambs come in January and February than in April and May, and if I could have them earlier, I should prefer it. Merino ewes will take the ram earlier in autumn than the English breeds of mutton sheep. For this reason, if for no other, in raising early lambs for the butcher, I should select common Merino ewes, or at any rate ewes having more or less Merino blood in them. There are other reasons why I should select such ewes. There are more of them in the country, and they can be obtained cheap. They are healthy, hardy, thoroughly acclimated, and will stand rougher treatment than the English mutton sheep. They are smaller, eat less, and occupy less room in winter quarters. They will bear crowding better than the large English sheep—or rather, they suffer less, for it is a mistake to keep any sheep in too close quarters. Common Merino ewes, like Jersey cows, when well-fed, give rich milk, and if you want early, fat lambs for the butcher, the mothers, no matter what breed you may select, must have plenty of nutritious food.

I do not say that common Merino ewes, are, in themselves, the best for raising early lambs. They are not. I have had grade ewes, the offspring of a mixed Merino ewe and a Cotswold ram, that would produce larger lambs, give more milk, and the lambs would fatten more rapidly, and mature earlier. But it is not always easy to find such ewes for sale. Those that you find in market are apt to be culls. The butcher, if he has a chance, gets the best lambs. A good plan is to go to some large market and buy a car load of sheep, or three or four times as many as you want. Bring them home, and pick out the best ewes, and then sell the other ewes and wethers to the butchers.—*American Agriculturist*.

When young men desire to enter college, they are obliged to pass an examination in grammar, algebra, geography, etc. Those elementary studies are not taught in colleges. The private or public school fits the student for college. In like manner, young men should be constrained to pass an examination in plowing, hoeing, sowing seeds, etc., before entering agricultural colleges. The farm should be to them the public or private school. Why should farmers' sons spend their time in learning in agricultural colleges what they can as well learn at home?

A Complicated Case.

A curious case is before the Tribunal in Paris. A gentleman was getting down from an omnibus in a crowded thoroughfare, when he missed his footing, nearly fell backward, and, to recover his balance, caught hold of another passenger. The latter, taken by surprise, also found himself in danger of falling, and, in his turn, caught hold of a woman with an infant in her arms, the upshot being that all four rolled together into the road. A heavy goods van was coming along behind which, had it not been for the prompt action of the omnibus conductor, who seized the horse's head, would have run over some of the prostrate forms. As it was, the gentleman who was the original cause of the accident escaped with a few trifling bruises; the other male passenger falling on him was not hurt at all, and the infant was equally fortunate; but its mother had her arm broken, and sustained other severe injuries. Which of the two gentleman should pay damages is the question—the one who caught hold of her or the one who caused him to do so by catching hold of him.

Hurt his Good Name.

"Yer mou' offer me er \$100 ter vote fur yer in de con'v'ntion an' it wouldn't hab no flu'ce wid me," said an old neg'ro in reply to a candidate who had asked for his support.

"Oh, I wouldn't offer you money," rejoined the candidate. "I believe in conducting a campaign fairly and squarely. Corruption in office seeking has cast a dark shadow over our institutions. I wouldn't think of offering you \$100. I haven't that amount of money, anyway."

"Yer ain't? Well den dar ain't no use talkin' ter me. How much is yer got, no-how?"

"I've got \$5."

"Uh, hum, no use talkin' ter me. I ain't gwine ter sell myself ter no white man."

"Of course not."

"Heah, whut yer gwine ter do wid dat \$5?"

"I'll make good use of it."

"Heah, lemme hab it. Dem folks thinks dat I see dun sold out. I declare to goodness, white man, it hurts er pusson's good name to be seen er talkin' ter yer."—*Arkansas Traveller*.

"Oh, don't propose to me here!" exclaimed a young lady, whose lover was about to pour out his avowal as they were riding by a corn field. "The very corn has ears."

THE SOLEMNITY OF AUTUMN.

By Rev. James Hastie, Cornwall.

The beauty of autumn, the bounty of autumn, the beneficence of autumn, these topics have often been despatched upon, and worthily so; but there is a kindred theme too often overlooked, viz.: The Solemnity of Autumn.

Pre-eminently, autumn is a solemn season. Autumn's beauty is the beauty of death. Autumn's plenty can be had only at the price of dissolution. The gorgeous hues of the maple and beech are but the pictorial form of the lament "Ichabod." "The glory (of summer) is departed." From field, and forest, and fruit trees come the solemn reminder: "We all do fade as a leaf." "In the midst of life we are in death."

The change that comes over the face of nature between June and October is not greater than the change that comes over man between youth and old age. In both cases, trials play an important part in the transformation. Sun and wind, and biting frosts have much to do in beautifying the variegated leaf and fruit. And is not character ripened and beautified by providential trials? Happy those whose autumn of life is more conspicuous for the beauty of ripeness than for the deformity of decay; whose character glows with love and meekness and goodness, with faith and hope and charity; who are more humble, more pure, more Christlike as the winter of the graves draws near. But, happily, the solemnity of autumn is not a gloomy solemnity, but a glad-some. It contains the promise and potency of coming seasons. The fruit it matures as it passes away is embryonic fruit, and contains in germ springs and summers and autumns yet to be. And has not the Christian the best of ground to be glad-some and hopeful in the autumn of life? "Marvel not at this, for the hour is coming, in the which all that are in their graves shall hear His voice and come forth; they that have done good, unto the resurrection of life; and they that have done evil, unto the resurrection of damnation." Yes, precisely so. "As the sowing to the harvest." "Glory, honor, immortality, eternal life"—this fruitage hereafter can only spring from Christ the crucified, believed in here and lived out in daily life. "As is the earthy such are they also that are earthy; and as is the heavenly such are they also that are heavenly. And as we have borne the image of the earthy, we shall also bear the image of the heavenly." "He that has ears to hear let him hear" to profit this present preacher on its timely topic: "The Solemnity of Autumn."—*Presbyterian*.

How the Sultan goes to Prayers.

At one end of the main palace is a handsome cream colored mosque with two minarets. Around this, though kept at a respectable distance, were crowds of people. The street leading to the mosque was also lined with an expectant multitude. Men were sweeping the streets clean, and then sprinkling fresh gravel over it, to make the passage of the carriage easier. Presently everything was complete, and soon after the glitter of arms appeared in the distance. The escort of soldiers was an immense one, representing the very flower of the Turkish army. They are well-developed men, elegantly uniformed, and under thorough discipline, as was evidenced by the admirable style of the few evolutions performed incidentally.

When the soldiers had been distributed properly in phalanxes about the door I could get a view of the royal train. There were two carriages filled with favored members of the harem who did not alight. There was one carriage containing the five princes of the royal household, scared looking little fellows, from 10 to perhaps 16 years of age. There was the Sultan's Cabinet and immediate staff on foot, directly in front of the Imperial barouche. There were two other men in the carriage with his Majesty, one of whom—a fine looking man—was Osman Pasha, I was told. The carriage halted, his Majesty alighted, and in company with a few of his intimates, ascended the mosque, the head priest sweeping off the steps before him. As he did so the mæddin in the minaret balcony above sounded his sonorous call to prayer.

Of course I could not get a good view of the Sick Man owing to the tantalizing movements of the boat. He is apparently of medium height, and, others who were present say, has an expressionless face, indicative of dissipation. Perhaps his sickness is not wholly political. He was dressed after the most approved French style, in a black suit, with fr. ck coat, black tie, and the national fez as a headress. The lapel of his coat was distinguished by two or three decorations, including, doubtless, the Star and Garter. I am told that his devotions consumed an hour.

A Nevada Fish Story.

It is asserted on the authority of persons who have recently visited Marlette Lake that the prodigious increase of trout in its waters has overstocked the lake. At times they can be seen massing themselves in the small streams which are tributary to the lake, and on these occasions they have been crowded out on the grass growing on the borders of the stream. Thousands could be thrown out with a pitchfork. A piece of bark thrown into the lake will cause a dozen or more of trout to leap for it. The coyotes have caught the knack of fishing and sit by the shore watching for leaves to fall into the water. The instant the leaf touches the water the fish rise, and like a flash the coyote bounds into the thick of the fish, and is certain to bring out one or two in his mouth. The coyotes are shot wherever any of the lumbermen see them, but by stealing up in the underbrush they manage to escape observation.

Origin of a Petticoat.

It was about the same date (1855-56) that our gracious queen set the fashion of wearing a scarlet under petticoat, an idea obtained from the milkmaids at Balmoral. It is said that the late Prince Consort, in admiring the effect of the red petticoat in the landscape, suggested that her majesty should adopt one also. This sealed the fate of white petticoats in England. They had been worn, previously to that, both in summer and winter, and, of course, in order to make sufficient warmth, several had to be put on, thus adding to the weight to be carried at the waist. Since the introduction of the scarlet skirt the fashion of the colored petticoat has been maintained, and the useful skirt lined with leather has also been introduced for walking in the country in muddy weather.

THE SALVATINN ARMY IN INDIA.

A War Between the Army and the Missionaries.

Here in Ahmedabad we from time to time hear of episodes in a comedy which is being played by the Salvation army and the missionaries. When Maj. Tucker with his "army" came up to Ahmedabad, the missionaries received them with open arms as brothers and fellow workers in the good cause, and lent Maj. Tucker their school-room to lecture and hold meetings in; and I believe once or twice, when Maj. Tucker preached in the open air, Mr. Beatty translated into Gujarati for him. Things went on thus until the hot weather came, when the missionaries, as is their annual custom, betook themselves to the hills—this year to Pinto's hotel, Matheran, Maj. Tucker, however, stayed in Ahmedabad, spending many of his days under the shade of a tree by the roadside, talking to such as would hear. However, in some mischievous moment, he seems to have remembered that the missionaries had a little community of converts occupying the village of Shahawadi, about three miles south of Ahmedabad, which community was their particular pride and care. Maj. Tucker seems to have thought that these Christians must be in special need of salvation, for he proceeded to invade the village with tambourines, tam-tams, banners, etc., and, after a little, succeeded in converting a large portion of the village, including the Patel, to the "mukhtifani."

The news reached Mr. Beatty at Matheran that someone was poaching on his preserves, and he hastened to rescue his flock. In a state of holy anger and pious grief he reached Shahawadi, and encountered Maj. Tucker in full possession—banners, tambourines, tam-tams, and all. Mr. Beatty proceeded to expostulate, whereupon Maj. Tucker went down on his knees and prayed audibly for the salvation of Beatty's soul. Soon after the dispute in the village took a practical turn, and the missionary converts would not permit the Salvationists to draw water. Hence a petition to the collector, who had to go down and make enquiries. He found that there were only two wells in the village. One was public property, and was usually used for watering cattle, but was then dry. The other well, on which the village depended for drinking water, was private property, belonging to a native Christian who was not a Salvationist, and who now, in a truly Christian spirit, refused to let the Salvationists draw water from his well. The recriminations on both sides were rather amusing. One old Salvationist lady exclaimed with much warmth: "Oh, I have drawn water from that well all my life. Why should you break my pots if I go there now? You're not Christians!" To this an old man retorted: "Why do you disturb us and frighten our buffaloes by marching through the village with your tam-tams and your banners and your horrid noise?" Maj. Tucker is now poaching on the missionary preserves at Anand and Borsad. The quarrel seems a very pretty one as it stands. We can only hope that the police will not have to interfere.—*The Times of India*.

AMERICAN FABLES.

THE BOY AND THE BEES.

A Boy who had a great curiosity to know how a Bee-Hive was constructed entered an Apiary and proceeded to upset a Hive, but while feeling in his Hind Pocket for a Two-Foot Rule the Angry Swarm alighted upon him and ran the thermometer up to such a Notch that he cried out in a voice which could be heard a mile away. When the last Bee had got in his Work and there was nothing but boot-heel left to Bite at, an old Snoozer with a Yellow Back and a Squint-Eye flew up on the Gate-Post to Pick the Bones out of his Teeth and said:

MORAL:

"Better wait until the Mule is Dead before picking up a Hind Foot to see how it is glued on. When Curiosity interferes with the Housework next door it is time to throw Flat-Irons."

THE HARE'S REBUKE.

A Hare who was out in the Early Morning to secure her Breakfast began stepping on all the Insects she Encountered, and even went out of her way to roll a Field Mouse on his back and make him feel his inferiority. He was having a Boss time when a Hawk swooped down and bore him away before he could repeat five words of the Prohibition Platform.

"Well, well!" chuckled an old Beetle who had been Hidden under a tuft of grass, "the One-Hare Power may be a big thing while it lasts, but the drop is too sudden for such blood as mine."

MORAL:

Jay Gould is a big boss, but —

TWO OF 'EM.

A Sly old Wolf who wanted some Pretext for Attacking the Hares Finally Announced that he had Become a Convert to a New Religion, which Privileged him to Dine on young Rabbit. Armed with this excuse, he was Promenading Around in Search of Meat when a Lion met him and Demanded an Explanation. When the Wolf had Explained his new Religion and his Intentions the Lion replied: "How odd! While your Religion Privileges you to Eat the Hares the one I have just Tackled Commands me to Paralyze every Wolf I meet! Take that for a Beginning!"

MORAL:

The man who gets a Spavined Horse while Trading Off a Blind One is Rightly Served.

A Potato Crop Destroyed by Lightning.

A flash of lightning struck an entire potato field of several acres belonging to N. J. Wood, of North Sterling, Conn. The vines turned yellow and sprawled over the ground. When Mr. Wood went to dig them a few days ago he found not a potato in the whole piece. It is the first instance on record there in which a growing crop was destroyed by the electric fluid.

AGATES.

Where They Are Found and How They Are Worked—The Ingenuity of the Agate Worker.

Scotland is famed for its agates, better known as "Scotch pebbles," which, although small compared with those found elsewhere, are yet unequalled in the variety and beauty of their colors. Scottish pebbles are found chiefly at Kinoull hill, near Perth, on the shore near Montrose, at Dunglass, and at Barn Aune, near Galston, Ayrshire, but whether they occur on the shore or in river gravels, they have been all previously washed out of trap rocks. The pebbles, cut by Edinburgh lapidaries, are used in the manufacture of Scottish jewelry. The chief seat of the agate industry of the world, however is at Oberstein, in Rhenish Bavaria, where it has been carried on for centuries. It arose there naturally enough, owing to the presence in the volcanic rocks of the neighborhood of an abundance of fine agates; but it has continued and extended long after those rocks have ceased to yield, or at least to be mined for, the raw material of the industry. The agate quarries of Oberstein were abandoned owing to the discovery, fully half a century ago, of a rich supply of those stones in the river gravels of Uruguay. Some German workers in agate, who had emigrated to that region, noticed the courtyard of a farm-house paved with pebbles that reminded them of the agates of their native Oberstein. Specimens were accordingly sent home and out, and the rumour proved correct. Since that time there has been a regular export of agate nodules from Uruguay to Oberstein, where they have long formed the staple material used in the agate mills. These "Brazilian agates," as they are called when brought to Germany, are arranged in lots and sold by auction, stones of ordinary quality bringing it is said, not more usually than 15 shillings per hundred weight. "German agates" are thus, for the most part, South American stones cut and polished at Oberstein. The extent of the industry has greatly increased with this accession of fresh material, and a few years ago there were no fewer than 163 agate mills, working 724 grindstones, and giving employment altogether to about three thousand persons. Cheapness of labor and a plentiful supply of water-power has much to do with the continuance of this industry at Oberstein. The labor is both ill paid and severe. The agate worker, says Professor Rudler, who some years ago visited the mines and mills, "lies upon a low wooden grinding stool, specially constructed to fit the chest and abdomen, leaving the limbs free; the hands are engaged in holding and grinding the agate, while the feet are firmly pressed against short stakes or blocks of wood screwed into the floor, the reaction enabling the grinder to press the agate with much force against the moving millstone. The friction thus produced causes the agate to glow with a beautiful phosphorescent light, and red carnelians under this treatment look, it is said, as if they were red-hot. The mill stones are of red sandstone, measure five feet diameter, and generally make three revolutions per second. The finer agates are sliced by means of steel wheels and diamond or emery powder, but the coarser stones are simply chipped into shape and ground. Afterward they are polished on rotating cylinders of wood or lead covered with moistened tripoli.

The ingenuity of the agate worker is not confined merely to cutting, carving and polishing his material into all manner of shades. He has also succeeded in varying its color by artificial means. The layers composing an agate differ considerably in porosity, those that are transparent, for example, being less porous than opaque layers. Some indeed, seem to be altogether impervious at ordinary temperature and pressure; and agate workers both at Oberstein and in India have availed themselves of this peculiarity in applying their staining processes. A suitable agate, after being thoroughly dried, is immersed in a mixture of honey and water or in olive oil, and is kept thus for at least three days, exposed to a moderate heat. It is then washed, dried, and put into a vessel containing enough sulphuric acid to cover it. The vessel is thereafter exposed to a gentle heat for a varying number of hours, when the porous layers are found to have become much darker in color. The reason of this is that these layers, having become saturated with the syrup or oil, are acted upon by the sulphuric acid, which decomposes the sugary or oily constituent and forms in its place a deposit of carbon. It is in this way that banded agate is converted into the onyx with its black and white layers, used in the production of cameos and intaglios. Exposure to a strong sunlight was long ago found to give a reddish tint to gray-colored agates, and this suggested the burning of such stones so as to convert them into carnelians. At Oberstein, likely stones for this purpose are first dried thoroughly, then saturated in sulphuric acid, and afterwards exposed in an earthenware crucible to a red heat. They are allowed to cool slowly, and are then seen to be of a bright red color. Not content with imitating the rarer natural varieties of agate, such as onyx and carnelian, German manufacturers have taken to staining agates blue and all sorts of colors unknown in the natural stones. Aniline dyes, unnatural as they are fugitive, have also been lately used for agate staining. It is possible that the stones themselves may yet be artificially produced. Indeed, according to King ("Natural History of Gems"), a Florentine anatomist long ago accomplished this feat, although unfortunately, the secret died with him. He is said to have petrified human viscera into real agates. "In the hospital of San Spirito may be inspected still by the incredulous," says King, "a table top made up of hearts, lungs, livers, etc., thus agatized into one large slab—meat board for a banquet of vampires!" Organic remains in agate are not unknown, for Bowerbank states that in the moss agates of Oberstein he has found microscopic organisms, and Dr Hedde says that he has found undoubted organic remains of considerable size in agates from Ayrshire and other localities.—*Edinburgh Scotsman*.

"What is the price of this axle grease?" asked the new clerk of a grocery dealer; "there is no mark on it." "It depends on your customer. If he asks for axle grease, charge him 15 cents a pound; but if he wants butter, make it 38 cents."

While the very young daughter of a country clergyman was playing in the garden one day, a stranger came along and inquired if her father was at home. "No," she replied; "but my mother is in the house, and she will pray with you, you poor miserable sinner."