



CARE OF SHEEP IN WINTER.

Sheep are tender, and but for their dense covering of wool could not endure our severe winters. In the wild state the lambs are not produced until mild weather. Domestication has changed the conditions somewhat, and lambs come early; but they are not well protected with wool covering, and require warmth. This fact must not be overlooked when the ewes are due to lamb.

TO DRY OFF A DAIRY COW.

To dry off a dairy cow, it is recommended that the animal be put upon rather dry food and the quantity of milk withdrawn at each meal should be gradually lessened—in other words, a little milk should always be left behind in the udder. After a few days only as much should be withdrawn as is found necessary in order to relieve the animal of an uncomfortable pressure of the milk glands. In addition to this the cow may be given about half an ounce of powdered alum in her drinking water twice daily, and the udder should be rubbed with an ointment consisting of one drachm of belladonna extract to an ounce of lard.

ANALYZING SOILS.

Soil Analysis as a Guide to the Use of Fertilizers is discussed in a recent press bulletin issued by the Ohio Agricultural Experiment station. This is a question of much practical importance, for it is a prevailing notion that the chemist can, by analyzing a soil, tell something of its needs in the way of fertilizer. A soil analysis is very expensive, and when made would usually have very little value as a guide to the use of fertilizers, for the reason that the chemist has as yet discovered no reagent which possesses the same capacity for extracting plant food from the soil as that of the living tissues of the plant. The only practical way of learning the needs of a particular soil is to make experiments on that soil, and learn which combination of fertilizing materials will produce the greatest effect.

VALUE OF PROPER PLOWING.

Proper plowing is one of the marks of advanced agriculture. No country ever plowed their land better than Americans, largely because we have the best plows in the world. The ancients merely scratched the top of their land with wooden plows, and the Chinese and Russian farmers do the same today; but American deep soil plows cut far down into the soil, and turn and pulverize the earth so that its tilth is improved a hundred fold. We do not have to go over our land so many times simply because we have better mechanical implements to do the work for us the first time. Set the plow deep, and let it bring up the subsoil so it can be used for increasing the productivity of the crops. With good plowing we are prepared to raise better crops with less worry and labor during dry summers than if we neglect or slight this all important work.—The Cultivator.

DAIRY METHODS.

Methods of dairy feeding is the subject of a timely bulletin by the Pennsylvania Experiment Station. During the winter months anything which has to do with improved dairy methods is especially valuable. The bulletin is made especially valuable because it has a brief and comprehensive summary, without which any bulletin is incomplete. The experiments failed to show any advantage in having water constantly before the cows in the stable. The cows that were turned into the yard for water once a day made as good returns as those having constant access to water in the stable. Much more bedding was required to keep cows clean and comfortable in the pens than in the stalls. Apparently it would not be economical to keep milch cows loose in pens on farms where the supply of bedding is limited. Considerably less labor was required to care for the cows in the pens than for those in the stalls. The increase in the amount of bedding would result in the production of a greater bulk of manure. The fewest bacteria were found in the milk of those cows which stood in the stalls, and which were, consequently the cleanest.

WHAT A FARMER SHOULD RAISE.

No matter what line a farmer may specialize in, he ought to raise as much of his own living as possible. First he should raise his own meat. If his business is cattle raising, let him supply the local butcher, retaining a quarter of beef for home use. If he is raising grain or running a dairy, let him put a small part of his farm to alfalfa, clover, peas, artichokes or grain for pasture, and then keep hogs enough to glean his stubble between harvest and replowing. Select some of the best pigs and feed them on wheat till they are in good order and then turn them into sausage, bacon, hams and lard. Don't eat fat meat.

If a part of the land has to be left in permanent pasture, or the farmer is near public range, a small flock of sheep will furnish excellent meat and in such quantities that all can be disposed of before there is danger of spoiling. It is not necessary always to consider the cost of meats secured in this way, for it is always profitable for the farmer to live well. It is impossible to secure the class of

meat on the market that the farmer can raise for himself if he will.

Raise a few acres of grain. Two acres of wheat will supply a family with all the flour needed. If you are near a good mill or if not get a small farm mill and a sieve and you will have whole wheat flour that will beat any that can be bought. Raise a little rye for brown bread, and no matter what other kinds of corn you raise plant a small patch of eight-rowed flint corn. Grind a little once a week and have johnny-cakes for supper. Don't forget an acre of buckwheat for flapjacks on cold winter mornings, and if there is any left over let the boys have it for their tame pigeons.

Raise all the poultry that you care to eat. Sell the young roosters and eat the old hens. The old hen takes a little more cooking, but they have more flavor. Have poultry for dinner once a week at least, and raise turkeys enough so one may be had for each holiday. The writer knows by experience that roast turkey tastes just as good for July 4 as for Thanksgiving. Consult the tastes of the family in the matter of fruit, and set out that kind to a limited extent, whether it is marketable or not. And don't forget to have plenty of milk and cream at all times of the year, as well as eggs for home use. If you should occasionally invite a city friend to dine with you, it might be the beginning of a line of agricultural industry radically different from the one you are making a specialty now.—J. R. Patterson, in American Agriculturist.

PRESERVING EGGS FOR WINTER.

The Rhode Island Experiment station has issued the second part of the fourteenth annual report. In the poultry division it treats at length on preservation of eggs, and gives the results of a large number of experiments extending over a long period.

It oftentimes happens that good eggs are on hand or easily and cheaply obtainable, and in the interests of necessary economy the poultryman or housekeeper desires to keep them for several weeks or months before using. Because of requests for some simple and inexpensive way of accomplishing this purpose, a number of experiments were undertaken at this station to ascertain what methods of preservation of eggs can best be utilized to economically and effectually hold the surplus of eggs, produced in spring, for a few months so that they may be used to advantage in the fall and early winter to supplement the production when eggs are scarce and costly. We advise and urge the use of the freshest of eggs for the household when possible, but our experiments prove that good, clean eggs may be easily and cheaply preserved for a considerable length of time when necessary. In most methods of preserving eggs it is desirable to exclude or sterilize the air, which may act as a conveyor of both germs and oxygen to the eggs. Fresh, infertile eggs, even after several days' subjection to the temperature of incubation, are found to have changed but slightly, and may be used for culinary purposes. A fertile egg, which has been incubated even for a few hours, so that the chick embryo has started to grow and has then by any means died, soon decomposes under ordinary conditions. Among numerous methods of preserving eggs the following have been considered worthy of experimental tests: (1) Water glass (a silicate of soda), (2) dry table salt (chloride of sodium), (3) slacked lime and salt brine, (4) vaseline, (5) dry wood ashes, (6) finely ground gypsum (sulphate of lime), (7) powdered sulphur, (8) brimstone fumes and sulphur, (9) permanganate of potash, (10) salicylic acid, and (11) salt brine.

Of the different methods tested in this series of experiments the old way of using slacked lime and salt brine proved to be very effectual, and has also the advantage of being inexpensive. It is also not difficult to practice. For a period of a few weeks only, smearing the eggs with vaseline may prove an effective method of preservation. In the place of vaseline almost any clean, greasy substance may be used. For a period of a few months only, packing in dry table salt is worthy of recommendation. Of all the substances experimented with, the water glass solution proved most worthy of commendation. The fourth series of experiments showed that the water glass solution could be reduced to 3 per cent, and still retain its preserving quality. Water glass can be obtained of druggists at from 40 to 60 cents a gallon. It is easily manipulated and the solution may be repeatedly used. The eggs should be completely immersed in the solution, and if any eggs float an inner cover which will sink them below the surface of the liquid should be used. In several tests where the eggs were placed in stone jars inverted saucers were used for this purpose. The expense for the water glass at 60 cents a gallon would amount to about two-thirds of a cent a dozen eggs. This does not include the expense of the jar or other receptacle, which may be of stoneware, glass or wood.

Under favorable conditions of peace the mortality among soldiers is practically the least known, with a death rate of only five in every 1,000. Compared with a soldier's life the placid days even of a clergyman are full of danger, for his death-rate is eleven in 1,000, or more than twice as great as that of his militant brother.

The Emperors of Austria are crowned Kings of Bohemia and Hungary with great pomp. So sacred is the Hungarian crown that its mere possession has been regarded as conferring authority on a usurper.



ORIENTAL PERFUMES THE VOGUE.

Among the fluctuations of fashion in New York City it takes study to be up to date on small matters. Perfumes, for example. Why should fashion control the use and sale of such things? Still, it does, and for reasons the dainty violet has reigned supreme in the favor of the queens of society. Suddenly a change has come. Not that the use of violet sachets and toilet waters has decreased, but the modest and faint odor must divide the honors with the more pervasive, heavy perfumes of the Orient.

The woman who in days gone was identified by the delicate fragrance of violet now, as she enters the room, transports one in fancy to the sunny East, where rainbow flowers make the air heavy with their rich perfume.—New York Herald.

ELIZABETH'S PET.

The old courtiers say the young Archduchess Elizabeth, granddaughter of Emperor Franz Josef of Austria, who is to be married to Prince Otto of Windisch-Grätz (who is not a royal personage at all, but simply a good looking, amiable young man of good family and irreproachable reputation), should have been a boy. In her garden she grows vegetables which she causes to be sold to swell her purse for the poor. In addition to a pony, ten dogs and several cats and five rabbits, she at one time owned a pair of goats, and every one of these creatures received her fondest affection and daily tidbits and caresses. It is said that the little Elizabeth has hated footmen and funkies since the day one of them refused to jump into a fountain after one of her pets. The drowning pet was rescued by a gardener.

LURING WISCONSIN SONG BIRDS.

The women of Kenosha, Wis., have long been openly opposed to the slaughter of birds for plumage, and for years there has been an unwritten law among them that only the ostrich plume, the coy feather and the quill shall be worn for the adornment of their millinery. Several years ago an Audubon Society was started in the city, and its influence has been far reaching. Many of its members are also active in the Woman's Club. Recently a plan to lure the song birds of Wisconsin to Kenosha has been undertaken by the latter society. The plans which the women have adopted for attracting the birds are of the simplest. Cups of seed have been placed in nearly every yard of the place, and near them are tiny bowls of water for drinking and bathing purposes. So far the English sparrow has shown the most appreciation of these overtures, but the leaders in the movement are sanguine that when the warm weather approaches others will avail themselves of these unusual privileges. It is also intended that houses for the birds shall be numerous throughout the place.

WOMEN WHO RUN BIG FARMS.

Many of California's finest farms are owned and managed by women. The annual State fairs literally overflow with superb specimens of grapes, peaches, pears, nectarines, apricots, nuts and berries raised by Mrs. E. Shields, who has 250 acres of land in the Sacramento Valley. Fruits are shown in their ripe state and in dried and packed forms; also, in the shape of preserves, jams and jellies. She has, also, many fine varieties of grain, hops, tobacco and other products.

Another pioneer beginning in an industry which has grown and prospered was the planting of two orange trees, originally from Brazil, beside the cottage home of Mrs. Tibbetts, in Riverside. From these is said to have sprung the Washington navel orange industry of California.

In one of the beautiful sub-valleys made by the broken contours of the Coast Range, lies the fruit and grain farm of Mrs. E. P. Buckingham. Long lines of orchard trees, heavy with fruitage, radiate in every direction from the homestead. The house itself was built in New England, and brought around the Horn (a common Yankee enterprise of those early days). These one thousand home acres, lying near Vacaville, have been planted and developed by Mrs. Buckingham within the past sixteen years. Two sisters living near the Bay of San Francisco, with no practical knowledge of horticulture, began with a bag of poppy seed. Within five years they have developed a business in rose and bulb culture which taxes the capacity of ten greenhouses. Like many others, they find a market for all they can produce among the florists of San Francisco.—Country Life in America.

A CHRYSANTHEMUM DRESS.

Now that fancy dress parties are so popular it is interesting for the woman who expects to attend such an entertainment to know that short, fancy dresses are usually more effective than long ones unless one is impersonating a historical person. A flower dress is very pretty—say a chrysanthemum. Have the skirt cut short, to reach about half way between knee and ankle, with a rather deep and stiff white muslin and lace balayuse inside to make it stand out nicely. Wear with it a very pretty muslin petticoat with several lace trimmed ballet flounces, each well frilled. Edge the skirt with a border of large chrysanthemums—white, pink and the tawny yellows that will tone with your crepon.

Trim it further with garlands of flowers running upward from hem to waist, large blossoms at the bottom gradually decreasing in size till those at the waist are quite tiny. Continue the lines with the smaller blossoms on the low necked, sleeveless bodice, and have a head of the large chrysanthemums.

On the head wear either a gypsy hat trimmed with flowers or a cluster of two or three fine blossoms worn in the hair at the left side well toward the front if the hair is dressed high, or toward the back if in the fashionable low coils.

Dull green shoes and stockings and long flesh colored gloves should be worn with a flower frock. The wearer should carry a long wand enameled rather pale green with a big posy of the flowers tied with wide satin ribbons matching them in color and with long ends. If the flowers are too expensive—a great quantity will be required for trimming the dress—they can be made from tissue paper at very small cost.—Washington Star.

SCHOLARLY MAIDS IN BERLIN.

Only three women have taken degrees at the University of Berlin. Two are Americans and one a Jewess. The latter was one of the first women to win a degree. Her name is Bertha Neumann and her father keeps a music store on Potsdamer strasse in this city. The family formerly lived in Posen. She is a phenomenal mathematician, with a "head for figures" that made the learned pundits of the University wonder and admire. As one of them remarked, she can calculate and eclipse without using pencil or paper and can recite pages of logarithms from memory.

The second girl to take a degree was Miss Caroline T. Stewart of Texas, whose graduating thesis was on German philology and they say it was the most learned and comprehensive essay on that subject ever read by the instructors in German literature. Miss Stewart and her sister came here in 1895 from Bryn Mawr College, having previously graduated at Michigan University, and Miss Caroline took her degree last year. She has returned to the United States.

This year the honors of the Berlin University have been carried off by a delicate looking little Yankee girl, with bright blue eyes and rosy cheeks, who looks frail and tiny, as if a strong gust of wind might pick her up and carry her away. It seems incredible that so much learning can be compressed into such a small compass. She is Mary W. Montgomery of New Haven, Conn., the daughter of a Congregational minister and former missionary, and a graduate of Wellesley College for women. She took her degree last summer for Oriental languages. She knows Sanskrit, Hebrew, Turkish, Arabic Greek, and Egyptian, and is probably the most accomplished woman in the world in those branches of learning. While Miss Montgomery has passed her examinations and received her diploma, she has yet to go through the formality of "promotion," as they call it. The ceremony takes place next month, after which she will return to the United States to apply her vast learning to some useful purpose.—Chicago Record-Herald.



Ropes of fine pearls with tassled ends represent one of the newest forms of necklets.

The latest fad is to have the jewels in the stock fastener match the color of the wearer's eyes.

Brown tulle, with chenille dots to match are worn with toques trimmed with mink or sable fur, and also when wraps or sets of the same fur are worn.

Pretty new white mousseline scarfs have the ends embroidered in point a jour, alternating with colored mousseline flowers, heading a killing of white mousseline de soie.

For fastening fur collarettes, evening cloaks or capes, art nouveau designs divide favor with gem set clasps and buckles, and the mountings are of gold, silver, gun metal, steel or jet.

In addition to the simple fichus of trilled white chiffon, which always retain a certain measure of popularity, there are some charming new designs which show pyramid additions of colored embroidery mingling with the lace.

The latest pendant is termed a talisman and it dangles from a slender chain of gold. One in Italian silver opens like a locket and makes an appropriate case for a tiny photograph or a similar souvenir.

Cherries in varying shades of red are used for trimming felt hats for young girls, likewise wreaths of currants with deep green velvet leaves, while clusters of purple and white grapes adorn some of the newest models in white beaver.

For little girls, long, loose fitting coats of black silk, satin or velvet are popular. These have a broad white lace collar that extends over the shoulders in a cape effect.

The Colonial tie is to be the dress shoe for women this spring. It is an imitation of the shoe worn by women in the Revolutionary period, and follows closely the original type. A conspicuous feature is the high flaring leather tongue, which is lined with leather and forms the background for a large buckle.

The Kings of Italy are not crowned, nor has Emperor William, either as King of Prussia or German Emperor, been crowned.

THE KARPATHIAN SHEPHERD.

A Veritable Savage Seen Twice a Year Leading His White Herd.

The Karpathian shepherd is a regular savage—tales innumerable are afloat as to his kinship with the fairies and the mountain winds. Twice a year only, in the autumn and in spring, he is to be seen leading his white herd assisted by a few hounds, who look like wolves, and are almost as mysterious as their master. The shepherd spends six summer months in utter solitude on the highest meadows of the Karpathians. He is dressed in a coarse white shirt, long mantle, and high cap of thick fur. His hair is raven black, and flows loosely on his shoulders. His white skin sandals enable him to tread lightly, and without much fatigue, the long, wearisome way that leads from the mountains to the plains and vice versa. He never accepts the shelter of a hospitable roof, but always sleeps near his herd, however hard the frost or deep the snow. He is seldom heard to speak, and is said to have lost the use of his tongue in his solitary existence. Many legends have grown and flourished about the silent, haughty youth, whose tall figure crosses twice a year the horizon of the Roumanian landscape. He is believed to belong not to the human race; he neither lives nor dies. No maid has ever loved the shepherd, however handsome he may be and however she herself may be inclined to love—a fairy alone can be tempted by his affection, and she runs a dangerous risk, for he is already betrothed to the fountain whose water springs among the highest and most lonely rocks, and the revengeful goddess punishes all mortals who cross her path or try to take her lover from her. Such are the legends that render the Karpathian shepherd interesting and attractive—he plays a conspicuous part in all the songs of our folk-lore, while his fate remains wrapped in the soft haze of mystery.—Contemporary Review.

Talking Aloud to One's Self. One of the most marked outward manifestations that the New Yorker gives of the high nervous tension under which he lives is his habit of talking aloud to himself in the street. This habit is one of the first things that observers of street life in New York notice. It is a form of nervousness that is due not only to the high pressure at which so many New Yorkers are kept, but to the noise of the street traffic. When the rush and rumble of the streets is so great that a man "cannot hear himself think," he speaks his thoughts aloud. It is only rarely that a woman is observed doing this. Sometimes the man who is talking to himself, if he is happy, will mumble only phrases and half sentences audibly. If he is angry or deeply concerned, he will speak steadily and sometimes make emphatic gestures. But nearly all of the men who talk aloud in the streets have their business affairs uppermost in their minds, and the word "dollars" is the one that is oft-tenest heard.—New York Post.

The Wit of Childhood.

The unconscious wit of childhood has been the theme of countless stories, but good new ones are always welcome. Several are given by Dr. T. J. Macnamara in an article in an English magazine, the New Liberal Review. Here is a specimen: When Mrs. Smith has called upon Mrs. Brown, and the hostess has received the visitor with the most gushing enthusiasm, it is a little embarrassing for Tommy Brown to slide up to Mrs. Smith and ask: "Do you live in a nice room, Mrs. Smith?" Mrs. Smith replies: "What a curious question, Tommy! Why do you ask?" "Why," says the ingenuous youth, "as you were coming up the garden mamma said that your room was better than your company."

A Pail Full of Cash.

David Long, a laborer, walked into the Second National Bank, of Danville, Ill., and placed his dinner pail in the teller's window and said he wanted to make a deposit. Then, to the astonishment of the bank officials, he opened the pail and showed that it was full of soiled and crumpled bank notes of an almost forgotten issue. There was a little less than \$1,500 in the pail and every dollar of it was of the war issue of thirty-five years ago and worth 100 cents. The bank retained the greater part of the money, but some of it was in such condition that it had to be sent to Washington to be exchanged. Long, who is about seventy years old, refused to make any explanation of how he came into the possession of the money. Crumpled up in some of the bills were small feathers and bits of straw, which gave evidence that the money had at one time been concealed in a bed.—Indianapolis News.

The Kings of Sweden are crowned "Kings of the Swedes, Goths, and Vandals," at Upsala Cathedral. The same monarchs are also crowned Kings of Norway at Drontheim Cathedral.

Recent figures show that about one marriage in every four marriages in France is childless.

The selfish man goes out of his way to get in other people's way.



King Edward has decided that there shall be no official jester at the coronation. Some of Mr. Austin's poetry is funny enough.

In England the photograph craze of the eighties is now being equaled by the microscope mania of today and society delights in seeing itself as the biograph saw it.

In view of the fact that about half a million postal cards are mailed every year in Germany without any address, the authorities recommend that the address should be written first.

Some expert statistician has figured out that Andrew Carnegie will be only a one-millionaire in five years' time if he continues to endow libraries at his present rate. Mr. Carnegie, however, gives no signs of worrying over his future.

John B. Clark expresses his belief in the Atlantic Monthly that a hundred years hence Manhattan Island will have streets in several stories, and that rifles, cannon, warships, and the wasteful burning of coal to make steam will be things of the past.

In the war with Spain our naval vessels were painted gray, but the British Admiralty is not quite satisfied that it was the best color for warships. In the way of experiment, therefore, it is having the channel squadron painted in a variety of colors, some of the ships being colored bottle green, others either gray, drab, tan, sea green or sky blue.

A French journal relates that when the late Li Hung Chang was at Lyons, he went to see, among other things, the Credit Lyonnais. After he had inspected the upper floors of the bank he was taken down stairs to the vaults, where the securities were kept. Picking out two bonds, marked five thousand francs, he put them in his pocket with the words "Joli! Souvenir de Paris!" The government afterward identified the bank.

The engravers at the Bureau of Engraving and Printing at Washington, have completed a vignette of President Roosevelt that will always be used as the official picture of the President. After his death it may be used on Government money or securities, but not until then. This vignette was made from what was decided to be the best photograph of the President after every photograph he has had taken in the last ten years had been examined.

In view of the considerable movement toward the use of alcohol for industrial purposes, the administration of the Lille International Exhibition, 1902, has decided to organize a special section for alcohol, in which all its applications will be represented, in order to favor the use of this product, and bring to the notice of interested parties the best means of substituting its use for that of petroleum. The object is to endow France with a heating, lighting and motive power produced from its own soil.

Statistics of gas manufacture in the United States for 1900, compiled in the Census Bureau, show that while the number of establishments has increased since 1890 only eighteen per cent., the capital invested has been expanded nearly 120 per cent. In the meantime the average cost of gas has been reduced from \$1.42 per thousand cubic feet to \$1.025. Competition with electric lighting has unquestionably brought about contraction in the field of gas manufacture; but in the larger centers of population there has been evinced little disposition to abandon gas as an agent for lighting and heating. Its business has been perforce divided; but it has by no means been relegated to the economic lumber room.

The other day Mrs. Alec Tweede wrote an article for the London Press on the selfishness of modern Englishmen, quoting an American girl as saying that English bachelors never returned women's hospitality. This started a stream of correspondence and elicited several amusing replies from English club men, who declare that no English girl would ever expect men to take her to tea, the theater, for a drive in the park, or give her candy or flowers, and that the American girl by her willingness to accept such attentions, comes in for considerable criticism. Mrs. Tweede also represented the American girl as saying she would not waste hospitality over those who would not return it. This commercialism has been greeted with jeers from various club men.

Germany seems to place a value on the services of women different from that which holds in France. In the latter country orders have been issued to cut down the number of women employees in the public service, especially in the postal service, as rapidly as possible, the reasons given being general incompetency, continual absence on account of illness and similar things. In Germany, on the contrary, the authorities of the state railways have announced that henceforth as many women as possible will be employed in service, and that women in the future will be eligible to posts at the telegraph and ticket offices, in the telephone offices and as clerks in the counting offices and freight department. Prussia has for some years favored the employment of women and this order will bring about like conditions throughout the whole empire.