

FARM AND GARDEN

SUGAR BEET DISEASES.

Three Fungous Troubles of Importance to Beet Growers. Many diseases of the sugar beet are known in the old world where sugar beet culture has long been an important industry, and already some diseases have become of consequence in this country.

Beet rot was first brought to Professor Duggar's attention as a disease of small extent in the vicinity of Binghamton. It was afterward reported from several other places, but not proved common. It may be the same trouble that has several times been very destructive to the sugar beet industry in Germany. The first evidence of an attack is manifest in the

CROWN OF BEET WITH LEAF SPOT. Blackening of the bases of the leaves, and the disease soon works into the crown and root proper, causing the infested parts to turn brown. This beet rot is found to be caused by the same fungus which causes stem rot of carnations and probably produces some of the "damping off diseases." Sixty to 70 bushels of air slaked lime per acre is suggested as a means of securing a preventive alkalinity of soil.

Professor Duggar's observations indicate that "leaf spot" is a disease which needs to be specially brought to the attention of sugar beet growers. It begins as small brown spots, with reddish purple margin, scattered irregularly over the leaf. In time the whole leaf is black and crisp. As the leaves begin to parch and dry they stand more nearly upright, so that a whole field badly affected with the disease shows a very characteristic appearance. The outer or older leaves are of course first affected, and after the leaf stalks with the leaves are shed. In the meantime the plant is endeavoring to supply this deficiency of leaves by continuing to develop new ones from the center or from the bud. In consequence of this the crown becomes considerably elongated, as in the first figure.

As to remedies the author says: For several years experiments have been conducted by Professor Hallett, at the New Jersey experiment station, in the treatment of this disease, and a successful remedy seems to be at hand in the well known bordeaux mixture. Numerous fungicides were experimented upon, but the bordeaux mixture has proved most efficient. There is every reason to believe that by beginning the sprayings early the leaf spot may be almost entirely prevented by the use of this fungicide. If the disease continues so disastrous as it was in certain sections during the past season, for success growers must expect to spray their beets with the same regularity as has been found necessary in growing potatoes.

As to beet scab the following are presented among other points in the bulletin: The smooth surface of the beet root may often be disfigured by warty or scabby excrescences. The texture of these injuries is somewhat corky or spongy, and the larger diseased areas will show that the injury is not entirely superficial, but to some extent alters the tissues immediately underlying such

Food Value of Hen's Eggs. A subject for continual discussion between poultrymen, and especially writers on poultry, is the difference, supposed or real, between white and brown eggs. On this question a bulletin of the government's agricultural bureau says, and this ought to settle it.

Let There Be Light. Light in the poultry house is an absolute necessity, and the inmates must have it to be in a healthy and cheerful condition. Fowls will not thrive in a dark and cheerless place any more than plants will.—Maine Farmer.

CARE OF BABY CHICKS.

Whatever is Worth Doing at All is Worth Doing Well. Many a busy farm wife adds to her manifold duties the rearing of chicks. The feeding and care that she bestows on these attractive little creatures are not wholly given because they are things of beauty, but because she knows that there are good "returns" in store for all the time and feed that she bestows properly upon the wee chicks.

Carefully examine mother biddy, and, if not entirely free from lice, subject her to the cleansing fumes of some good lice killer. If you have none, saturate an old rag with kerosene, rub her legs well and brush over the feathers lightly, taking especial pains to rub the breast feathers, wings and under part of the body feathers, but do not have wet enough to drip. Place her in the coop with her babies. Hens treated in this way once a week or once in two weeks will rarely have any lice to transmit to their chicks.

A hurdle, built of woven wire or lath, about the coop to protect the chicks from other hens or from some cat intent on a juicy morsel for herself or her kittens, is a wise precaution, a necessary one if you desire to raise a large per cent of the chicks hatched, especially necessary if you are raising pure bred birds. The wire can be taken down, rolled up and put away until the chickens are grown, and will last for years.

After using a variety of foods I have for the past two years fed rolled oats and millet seed almost exclusively. One might think it expensive food, but it is not. Take a few dozen eggs to the grocer and exchange them for oatmeal. If you are not more than pleased with the results and the cheapness of this feed, then your experience will differ greatly from mine. On no account wet or cook the oatmeal. Feed dry always. Millet seed makes them plump as quails. Place the coops where the chickens can have access to the garden, and they will clean all the bugs and worms that this soil affords and will also get all the grit they require. Never neglect to provide them with plenty of pure, clean water. If one hasn't a drinking fountain, a very good substitute is a saucer or tin plate in which a baking powder or tomato can is placed. We vary their feed by giving occasionally finely chopped corn or baked eggs. As soon as garden vegetables begin to grow shredded onion tops and crisp lettuce leaves are added to their bill of fare. As the chicks develop we change from oatmeal and millet seed to cracked corn (for night feed) and give wheat screenings or buckwheat screenings.

Always see that the little feathered pets are securely housed if an endemical storm is imminent, and let the chicks warm. A chilled chick is quite as bad off as you would be in a like condition. Remember they are "baby" chicks, and if you would have them grow and thrive you must treat them accordingly. Cold and lice are their greatest enemies, the two sources from which nearly all their ills emanate. Careful housing, nights and rainy days will prevent the former, and clean, fresh and a judicious use of a good liquid lice killer certainly will prevent or totally annihilate the latter. You may think "would rather let them take their chance than let them be killed by a disease." Do you hatch 10 to 12 chicks from every sitting and rear them all when they "take care of themselves?" Or do you have several hens wandering around half the time, and with one or two, possibly three, chicks apiece? Do you get \$1 to \$10 for a pullet or cockerel? Do you sell sitings of eggs at \$1 to \$5 each? Dear farm sister, "Whatever is worth doing at all is worth doing well."—Alma Cole Pickering in Housekeeper.

Give Sheep Plenty of Room. After some years' experience in raising sheep, I have concluded that it is not best to keep them confined too closely, writes Frank M. Beverly in Land and a Living. Their confinement in one place breeds disease and it may be said is a drawback generally. Sheep will not thrive alone on what you may feed them, but they require something that is indigenous to the woodlands. The farmers in Virginia 25 years ago raised large flocks of sheep, and they were allowed to run in the woods both winter and summer, except during deep and continued snows, when they were brought in to keep them from becoming poisoned by eating ivy. They had to be given salt, but required little in the way of feeding. They were thrifty, and always looked clean and healthy. Of course this plan is not now practicable, except in a few of the more isolated sections of the country, but the plan should be carried out so far as circumstances will permit. Your flocks may have to be kept within fenced inclosures, but they should be shifted from one place to another as often as possible. I knew a man a few years ago who bought up 100 or more sheep during the fall and winter, intending to go into the business of sheep raising on a rather large scale. He kept them in a field where there was a large barn, in which he housed them every night. He fed them all they would eat of corn, fodder, hay and oats, but when summer came about one-half of them died, and the other half looked as if they might as well die. He then sold the flock at less than half the price per head he had paid, and thus ended his dream of sheep raising.

QUEER OLD LAWS.

Saxon Forefathers Valued Horses Higher Than Human Life.

Among our Saxon forefathers horses were so highly valued that while homicide might be compounded by payment of a fine in cattle, horse stealing was a capital offense, says the London Live Stock Journal. Later, when cattle ceased to be their only wealth and coinage came into use, pecuniary fines were inflicted for homicide. By the riparian laws the option of payment in coin or cattle was allowed. Under the same and riparian laws homicide had different degrees of guilt, decided not altogether according to malice, motive or intention, but also and apparently as to the rank of the person killed. A similar regard for the dignity of the person robbed also entered into the estimate of the guilt of theft, in connection with the value of the property stolen. For stealing a sucking calf, restitution to the estimated value of the animal was first of all due to the owner, then cost of the owner's plaint must be paid by the thief, and, thirdly, a fine paid to the state as a penalty for breaking the law. For stealing a bull the fine as well as the compensation was heavier, but here came in the question from whom the bull was stolen and what was the owner's rank and dignity. To steal the king's bull was a very grave offense indeed, not quite capital, but punishable by a ruinously heavy fine, whereas the guilt of taking a poor man's bull was reckoned as proportionately small. Before the use of money was introduced, the fines for inferior offenses (including doubtless homicide) were sometimes paid in horses instead of with money. This seems a curious inconsistency, that the law, which valued a horse more highly than a man's life, yet exacted payment for man killing to the extent of a plurality of horses (each horse worth more than a man, by the law's valuation) or an alternative equivalent in cattle.

Attend to the Rams.

It is too late to sow seed just about the time the harvest is expected, and the summer is very hot, says the American Sheep Breeder. A ram in vigorous, active condition is not so made in a few days, nor can a little seed needs months to make its full growth and to gather in the plant's nutrient and substance to form the new germ. A whole summer is needed to bring the plant of corn and prepare the seed for the next year's harvest. This applies with equal force, but more conspicuously, as the sheep exceed the mere plant in worth to the wish to have all twin lambs. Two are better than one—sometimes, but not always. A strong, vigorous lamb is better than puny twins or even than fairly good twins, if the dam is only able to care fully for one of them, and if one will have strong double births he must attend to the ram first and begin now to put him in proper condition for the service expected from him by and by. He does not want to be fattened exactly, but he must be in prime condition, for we cannot get any animal in such condition without putting some fat on his carcass. The best of grain food in the summer for the ram is linseed oil meal, from which the oil has been separated, and the residue of protein is left in large excess. This part of the food is especially useful in maintaining all the vital organs, and thus gives the male animal, especially such a one as the father of a flock which has so large a number of females demanding attention. The time to begin re-fatening the ram is now at hand. The twin breeding flock is greatly desired by every shepherd. But it is made only by years of work in building up the constitution of it by the highest possible feeding. For the scientific principle at the bottom of it is that animals become more prolific as their supply of food increases. This is one of the examples of the balance of nature, and the economical disposal of natural products for the best interests of the universe, in which naturally nothing shall go to waste.

OUTING GOWNS.

Costumes and Accessories For Out of Door Sports.

Black stockings are worn with outing gowns, or stockings the color of the shoes. The hat retains a suggestion of the masculine, feathers, flowers and gauze being rigorously avoided. Ribbon and silk bands, knots and bows, with a quill or two, are the usual trimmings. The sailor and the Troiean stand foremost in favor among shapes.



NEW CRAVATS. Checks are well represented in this class of materials and are really more serviceable than the plain goods. Red vests of elastic wool, like the old fashioned cardigan jacket, are worn for golf playing, and they nearly always have silk sleeves of the same shade. These scarlet accessories are worn by both men and women players and are attractive bits of color in the field.

A picture is given of three fashionable cravats. The first, worn with a standing collar with turned down points, is of white moire and is called the regate. The second consists of a stock collar and butterfly knot of red taffeta with stitched plaids. The third, which is more elaborate, is a bow of taffeta with guipure points and openwork lines, which is mounted on a stock collar of plaided taffeta, points of taffeta matching the bow appearing above the collar. JUDIC CHOLLET.

THE PREVAILING MODE.

Many Rings and Few Gloves in Elegant Society. Artificial flowers being much worn, not only as a trimming for hats and bonnets, but in the form of boas and ruffles and on evening gowns, the latest fad is to perfume each flower with the odor properly belonging to it.

Supreme fashion prescribes that rings shall be worn on all the fingers; therefore gloves are discarded at the theater and at evening receptions, and there is likely to be a return to mittens of the first simple style. At present the long sleeves which cover the hands to the fingers are considered a sufficient shield, the multitudinous rings previously mentioned taking the place of gloves, with which they



MILLINERY NOTES. Hats and bonnets are of the airiest texture, gauze, mousseline de soie and tulle being immensely employed for them. One of the most novel and delicate millinery trimmings consists of large balls of tulle on a tall wire stem. The balls are made of ruffles of tulle gathered together at the center on the same principle that is exemplified in ball penwipers. Large flowers—often really colossal roses, bluettes, etc.—are favorites, and there are touches all of flowers, as well as hats having either the brim or the crown of flowers, while the rest is of something else. Open straw and straw finely embroidered are also much worn and are very light. The old fashion of foliage covered with a white bloom is revived, and great bunches of such whitened leaves are seen on many hats and bonnets alone or combined with flowers. Bluettes are probably more worn than any other flower. Then come violets and afterward a crowd of flowers held in about the same esteem, one as another. Roses and cowslips of all colors and hyacinths have a prominent place. Less frequently seen, but exceedingly attractive, are clusters of hydrangea in the delicate natural shades of blue, pink, green and lavender combined with white. These are a charming decoration for a white or pale gray hat, and some exquisite models are exhibited.

The picture shows a toque of draped straw of a cherry red, which forms a large knot in front, pierced by a long, curling feather, which turns to the right. At the left side is a large bunch of lilacs of the valley. The same idea may be carried out in dark blue straw, with a black or brown feather and bluettes. JUDIC CHOLLET.

THE NEW BOY. "Now, Bobby, if you are not unreasonable, you can choose your own birthday present." "Well, pa, I don't want much. I just want a soda fountain in a new wheel on a cash register."—Detroit Free Press.

OUTING COSTUMES.

Suits For Wheeling Wear, For Town and Country.

Bicycle riding having now become almost as common a habit as walking, the bicycle costume is an interesting subject to most women, although it is no longer the burning topic that it was at first, when it served as a bone of contention for ex-guineas both pro and con. All women do



not wear the same kind of bicycle suit, not simply because there is diversity in taste, but because there are individual points to be considered, such as age, weight and the sort of riding to be done. A woman who bowls along a few miles upon an asphalted pavement in the level streets of a city can dole her much more daintily than one who takes long trips over rough country roads, where mud, water and dust are abundant, tumbling a thing to be anticipated and a drizzling shower not an impossibility, to say nothing of a great deal of exertion and consequent warmth, prone to wilt rills and furbelows. Frills and furbelows are never, indeed, appropriate to bicycle clothing, which should be always of the tailor-made order, trim, close and free from floating ends and fluttering accessories, but white, mastic and pale gray gowns, patent leather shoes and similar attire may be worn by the easy rider, who is contented with a spin around the square, whereas the country excursionist must get herself up in a far more substantial fashion.

The outfit shows a bicycle costume of gray cloth, stitched ornamentally with black. The skirt is short, and there is a bolero with two steel buttons, having stitched revers and a creneolated collar. The pocket flap, sleeves and cuffs are also stitched. The skirt waist is of black and white check, the belt of tan leather with a steel buckle. The gray straw hat is trimmed with black. JUDIC CHOLLET.

CLOTH COSTUME.

flowers are more attractive than the laden hats. For the toques hyacinths, roses, violets and sometimes pansies are employed; also large separate petals of poppies. It is predicted that flowers will again be seen on parasols. The gown illustrated is of beige cloth, the skirt opening at the left side over a panel of Nile green silk with horizontal corded tucks. The left side of the tablier is embroidered with white applications. The bodice, also embroidered and opening at the left side, has a sort of yoke and plastron of corded silk like the panel and fastens with hooks and gold buttons. The cravat is a jabot of white lace, and the sleeves are plain. The hat of beige straw is trimmed with silk green plumes and ribbon, with a show of pink silk under the brim. JUDIC CHOLLET.

THIN GOWNS.

Light and Attractive Materials For Summer Costumes. Among the lightweight silk goods for summer wear are mousseline satins with delicate printed designs resembling painted decorations, various taffetas, some with brocade effects, others covered with open embroidery, still others with a broken surface of checks, stripes or similar ornamentations, and toulard, which has been attractively varied and appears plain and with attractive stamped patterns. Silk batiste is also seen and is very cool and attractive. There are transparent wicker goods likewise in all colors and black. Chief in importance among them are thin canvases and wool gradines, which are serviceable for the seaside, white cottons, musins and silks apt to become stringy in the moist air. The wash fabrics are charmingly dainty, however, and will be extensively worn during the approaching hot weather. Swiss muslin, white and colored; batiste, gauze and percale, are chiefly seen. A kind of designs appear, but stripes pre-



WEDDING GOWN. The wedding gown depicted is of white satin, the skirt being plain except for a ruche of mousseline de soie around the edge. The back is in the princess style, but the front forms a draped bodice, with coquilles of old point mingled with orange blossoms. The round yoke and the sleeves are of mousseline de soie shirred with little seedings, the yoke being framed in a garland of orange blossoms. JUDIC CHOLLET.

What, Indeed? "There's no use trying to make anything out of a man who wears a No. 8 hat and No. 9 shoes." "Perhaps not, but what are you going to do with the 'Jova' fellow who wears No. 5 shoes and a hat that holds half a bushel?"—Chicago News.