Care of Pregnant Ewes.

The chief items of proper management to be remembered and put into practise by the young shepherd are that pregnant ewes must have plenty of exercise, must be kept dry, and must have such feed that their bowels will be active.

Ewes can not stand wet or damp beds, and so far as possible should be protected against wetting by rain or snow. They need not have hot, close stabling, but must be protected against cold winds driving hard over snow. Such winds may blind an entire flock in a single day.

To insure exercise when the snow is deep, use a snow-plow and open a path to a distant field to which the sheep may walk. There furnish them with hay in racks, or if the snow is not deep scatter it over a wide area, as that encourages exercise by increasing the walking. When pregnant ewes have to walk, they stimulate healthy circulation of their blood, and thus keep their excretory organs in active condition. Sluggish livers and kidneys cause absorption into the blood of poisonous matters called toxins, and these readily kill sheep. All sheep need exercise in winter; but keep pregnant ewes out of brush and weed patches.

Many of our readers, no doubt, are well aware that a horse is liable to an attack of agoturia, characterized by dark-brown urine, swelling and hardening of the muscles of the loins, hips and thighs and paralysis of the hind legs, when he goes to work after having been kept in for a day or two and fed heavily on oats. We are convinced that many cases of paralysis in hogs are caused in exactly the same way; and many pregnant ewes are poisoned in that way.

Timothy hay is mighty poor stuff for a pregnant ewe. So is swale and slough or marsh hay. It only bluffs the belly of a beast and, by distending the paunch, overworks the liver and tends to cause constipation and breaking down of the liver.

Feed sheep on good clover hay, or alfalfa hay and clover hay, and add two pounds per sheep each day of roots or sound silage to regulate the bowels. Don't feed old, weathered fodder or coarse straw. Do not allow the ewes to yet into a fat, flabby condition. They should be kept muscular at all times, and with bowels active; to this end it usually is necessary to supply some feed other than roughage and roots or silage that milk may be plentiful for the sustenance of lambs. For that purpose nothing is better than a mixture of whole or crushed oats, wheat-bran and oilmeal, and some shelled corn may be added in cold weather.

Keep pregnant ewes quiet and free from alarm. Only use a dog that the ewes know and trust; he should not be a heel-nipper or loud barker. All work with ewes should be very gently done. The shepherd will have to lose some sleep every night during lambing time, so that no ewe shall die or have lambs die from lack of timely attention.

Location of Farm Buildings.

Location of farm buildings is of the greatest importance. Many steps are wasted daily because of poorly located buildings. A different problem is present on different farms, so that it is impossible to lay down hard and fast rules for locating farm buildings Local conditions, such as natural drainage or slope, will affect the location to a great extent. Here are some suggestion for the location and arrangement of farm buildings:

The farmstead should be conveniently located with respect to the fields.

The farmstead should be near an improved road.

The barnyard and lots should be well drained, either by natural drainage or tiles.

Eave troughs emptying into drains or cisterns will eliminate much mud in barnyards.

An exposed hill is undesirable, but a south slope is to be desired.

A timber windbreak is valuable on the north and west of the farmstead.

The buildings should be grouped around a central courtyard.

The corn-crib and granary should be convenient to the barn and hog-houses.

A water supply must be available. Running water in house, barns and yards is a great convenience.

Barnyards should not face the house or road.

The barn and yards should be from 150 to 200 feet from the house, and not in the direction of the prevailing winds.

The house should be set well back from the road to avoid the dust.

The house should command a view of the barn door, the front entrance from the road, and the central courtyard.

The shop and implement shed should be handy to both house and barns.

The poultry house may be nearer the house than the other buildings, but should be so placed, if possible, that the chickens will not overrun the yard.

The planting of shrubs in corners improves the appearance of the farmstead.

Good fences are to be advocated.

All buildings and fences should be kept painted and in good repair at all times.

Concrete walks from road to house and from the barns to the house will eliminate the tracking of dirt into the house. In making walks, it is wise to excavate from eight to ten inches and fill in with from four to six inches of cinders or similar material, well tamped to make a good base. On top of this place three and one-half inches of concrete tamped in place, and a top coat of one-half inch of cement mixed in the proportions of one part of cement to two of sand. The gravel for concrete should be well graded in sizes from one-fourth-inch to one-inch, and for this material the proportions may well be one part cement, three of sand and six of gravel. Poorer materials should have a richer mixture. The top coat should be troweled to drive it into the concrete base.

It will not be possible to include all of these suggestions in one farmstead, but as many as possible should be used.

Fruit Trees Along the Highway.

Why not plant fruit trees instead of maples, elders, poplars and oaks along the highways?

Of course, you will raise the objection that if fruit trees grew along the highway, the fruit would be stolen. But what of the farmers' fields of corn, melons, potatoes, other vegetables and fruits?

Joint ownership, community interest, public opinion and a little healthy fear of the law, all combined, would do much toward protecting crops.

The trees should be planted and kept under the jurisdiction of the Provincial Agricultural Department. In cities, towns or villages, the jurisdiction could be vested in the local council, the fruit within its boundaries then being reserved for its inhabitants.

As for disposing of the fruit when ripe, that is the easiest part of the whole plan. You and I would certainly be on hand at the public auction to bid in some of the best trees. Your wife and mine, your children and mine, each with his or her own interests, be it jellies, preserves, pies or tarts, would also be on hand to help make the proper selection.

A certain per cent of the fruit should go to the provincial and city charitable institutions. The rest could be auctioned off to the highest bidder. The householder especially where there are children, would be given first choice. If one family could not afford to purchase the whole crop on one tree, or would like a part of several different fruit trees, then several families could club together and pool their interests. After the householder had his choice, the farmers who wish to market the fruit, would be given an opportunity to bid for their share in the crop.

The price would be so regulated by the committee in charge of the auction that there could be no profiteering with the property of the community. The money realized should be used for the initial expense, the upkeep, and the salaries of the provincial or town officials who have the trees in charge.

The best trees to plant along the highway, instead of shade trees, are apples, cherries, pears and nut-bearing trees. These can be planted in certain numbers, or alternated as the climate and conditions are favorable. This planting should be left entirely to the discretion of the provincial agricultural experts who have the necessary knowledge and are the proper persons to exercise authority, together with a local committee from each community.

Notes on Various Subjects.

Probably the best tool protector and carrying-case for a small kit may be made in the shape of a roll from a piece of leather or leather substitute having a napped or fleecy back.

Test the sharpness of the tool by drawing it across the thick of the thumb, to see if it takes hold of the skin. If not, then it is not sharp; but if sharp, it will take hold enough to catch the skin, and care must be taken or a deep cut will result.

When a tool has been honed, draw the corners across the hone once or twice to round the square corners. This will prevent the corners making a score or mark on the surface of the wood when it is cut or planed.

Next time you have a job of putting in a window-light, make your own putty. Mix Portland cement with just enough linseed oil so it will be crumbly under the knife. This mixture sticks to glass and wood, stays where you put it and never dries out so hard as regular putty.

If the silo is empty, refill with shock fodder run through the silage cutter. The operation is the same as filling from the field, except that water is added.

Poultry

Closely watch and cater to the appetites of fowls. Just what would be right for one flock might be wrong for another. It is always well to have the fowls partially hungry. This will induce them to scratch. Scratching is the best exercise for hens.

To be continually changing the bill of fare hurts egg production instead of benefitting it. Have one system of feeding, but let that system contain as much variety as possible. Purity of food is important.

Overfeeding is not feeding well. What a hen is able to digest and assimilate, and not what she eats, makes both eggs and flesh. The principal requirement of a hen is a balanced ration and regular feeding. "A feast to-day and a famine to-morrow" will upset the best of layers. If the stock is doing well under one system of feeding, it is a mistake to make a change.

Careful calculations show that a fowl will eat, on an average, three ounces of the morning mash, two ounces of grain at noon and four ounces of grain at night. However, there can be no set rules for feeding. Like human beings, fowls vary in appetite. We must approximate the amount. The quantity must be determined according to the object in view. Some fowls can exist and be prolific on almost half what would be needed for others. When this is noticed in a pen, it is advisable to cut down the allowance to meet the demand.

More fowls are overfed than underfed. While overfeeding has its bad effects, underfeeding is equally bad. An underfed hen may receive sufficient food to sustain the body, but there is a lack of material for egg making. The first food a fowl takes goes toward the building up of waste tissues, and the surplus to the making of eggs or fat, according to the quality of food.

Well-Arranged Fields Lessen Crop Costs.

Investigations show that well-arranged fields and farms generally produce crops at a lower cost price than where no particular system of field management is carried out.

Well-arranged farms also bring a higher price upon the market, particularly where the fields have easy access to the farm buildings or to highways. The arrangement of many farms is due to accident, a field here and there being laid out as the forests were cleared away. Many were laid out when farm work was done with hand implements and small fields were no disadvantage at that time.

The Sunday School

INTERNATIONAL LESSON.
February 29.

Peter Writes About Christian Living. 1 Peter 2: 1-5, 11, 12, 19-25. Golden Text—1 John 2: 6.

1.-5. **Laying Aside All Malice.** Peter is exhorting to pure and honorable living, such as is becoming to the followers of Jesus Christ. Malice toward their enemies or persecutors, deceit, envy, false pretence, evil speaking—all are to be put away by those who have tasted of the grace and loving-kindness of Jesus. They are as babes growing up in the family of God, desiring "the sincere milk of the word," that is the pure gospel of the life and teaching of the Lord, by which their own life will be nourished and will grow strong.

By a change of figure they are represented as being built with Christ into the walls of "a spiritual house," or, as St. Paul puts it, "an habitation of God in the spirit" (Eph. 2: 20-22). The ideal is that of a house or temple of humanity, ordered and perfect in all its parts, in the midst of which God will dwell—a redeemed and glorified humanity. Jesus Christ, the corner-stone of this house, though rejected of men, is chosen of God, and each life of faith is joined with Him in the growing walls. Again the figure changes to that of an "holy priesthood," of which Christ is the chief, offering the sacrifice and service of good lives upon the altar of consecration.

11-12. **Abstain from Fleshly Lusts Which War Against the Soul.** There is no teaching here of unnatural abstinence or ascetic self-denial, but only an earnest exhortation against such indulgences as are distinctly hurtful to mind and heart, and such as either militate against a man's own best life or unfit him for service to others. The high ideal of the Christlike character is set before the eyes of the followers of Christ.

Peter addresses them as strangers and pilgrims, people who live only for a little while here upon the earth, who have here "no continuing city but seek one to come." The goal of all good life lies on before, and it is worth a little present self-denial to make sure of the eternal and glorious treasure of the city of God.

Moreover they, who are Jewish Christians, live among Gentiles who speak against them and regard them as evildoers. It is only by upright and blameless life, by "good works which they shall behold," that they can be convinced, and may themselves be led to glorify God when their time of trial and temptation comes.

19-25. **For Conscience Toward God.** If a man for conscience sake suffer, it is a creditable and honorable thing, acceptable as a service rendered to God. To bear such suffering with patience is the Christian's duty; it is indeed to this he is called; for so did Christ Himself suffer.

Who his own self bear our sins. It was as though He, the sinless one, had taken upon Himself the guilt of our sins and suffered for us, or as though He had entered into the midst of our corrupt and sinful life, enduring all the pain that it could inflict upon Him, that He might lift us to His own purity and rightness of living, "that we being dead to sin should live unto righteousness."

This whole passage is reminiscent of the great prophecy of the suffering servant of Jehovah in Isa. 53, which should be read in connection with this lesson.

Ventilation of barns is never more important than when they are closed during cold weather.

Try a few specialties when ordering farm and garden seed. Try one new vegetable each year.

To remove the coating from stove-pipes and chimneys, due to burning green wood, dissolve air-slaked lime in water until the water will take up no more. Then apply it with a white-wash brush to the inside of the heater flues and smoke-pipe. Remove the smoke-pipe and apply it to the base of the chimney. Put back the pipe and start a fire. The tar-like substance will drop off the flues, or can easily be scraped off.

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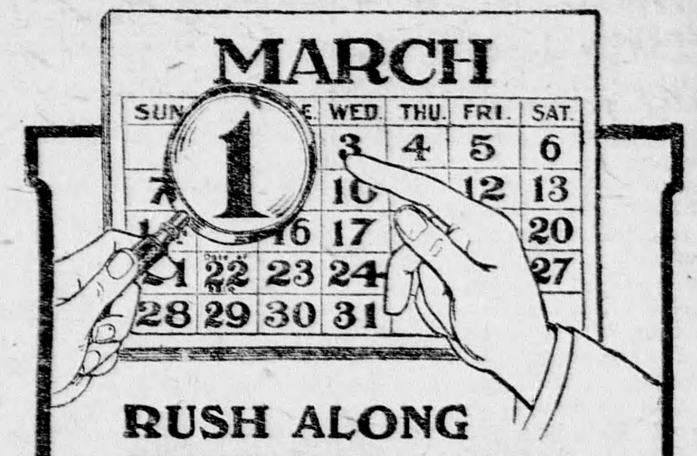

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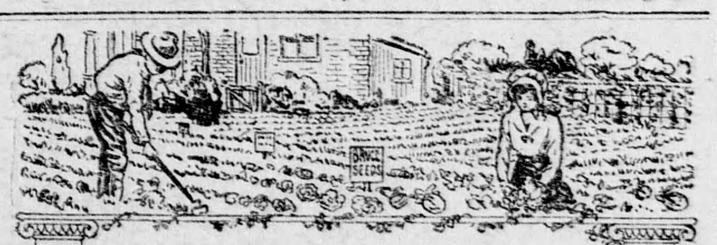

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