## Breeding and Care of Geese.

With proper management, there is no branch of poultry-keeping that pays better than the propagation of geese. While a person may be successful in the management of other fowls, when they undertake goose culture they are wholly at sea, and failure is the result. There should be almost as much difference in food, care and treatment given geese, hens and turkeys as between hogs, cattle and sheep. Unlike the hen or turkey, geese are not so much grain-eaters, but are grazers more like sheep, and an oversupply of grain will not answer. Having more the nature of sheep as grazers, it follows that in order to grow them profitably they must have free range and an abundance of grass. With this provided, they can be grown at small cost, and will return a larger cash dividend than any other class of poultry. They must never be confined to buildings, as a constant supply of pure cold fresh air is an absolute requirement. They can be varded if kept constantly supplied with fresh green stuff, but even then they do not do so well as when on free grass range, and the cost of maintenance is largely increased. Should they be yarded, more than one yard must be provided, as the soil very soon becomes foul, and if confined to it disease is liable to follow. It is best to supply them with a swimming pool, as it gives them exercise and the eggs are generally more fertile, but it is by no means an absolute necessity. They should, however, always have a constant supply of clean water for drink. The goose is a long-lived bird, and is slow in acquiring full development. It therefore follows that the best results are obtained by breeding fowls of not less than two years old. They do not mate readily, and for that reason it is well to place the sexes together from six to eight months before breeding time in order that they may become well acquainted. After having mated, a strong attachment grows between the sexes, and instances are known when, after the female has been removed for any cause, the gander has refused to mate with another, and in some cases died, apparently from grief. As a rule, three or four females should be allowed to one male. We frequently find that when the eggs have failed to hatch, the goslings are dead in the shell. This usually results from mating immature fowls. By selecting birds as breeders two years old or more, with plenty of grass range, there is no reason why any one can not succeed in raising geese.

# Care and Management of Hens --- The Breeding Season.

The rush of the breeding season is upon us now, and we must study to get the best results from our matings. Most farmers do not have any breeding pens. They let all the hens run together, sometimes seventy-five or one hundred, with half a dozen or more male birds with them. There is no sense in keeping so many males. It would be far better to have a pen large enough to accommodate ten or one dozen fowls, and put in this pen some of the best fowls.

There is a difference required in management, whether the intention is to raise layers or market birds. If layers, pick out the medium-sized, young, active birds which have red combs, those which are singing around most of the time and working from morning till night. Do not take one of the sluggish ones, as it is not likely to be a good layer. Having got ten or twelve of the best you have, of course you need a pure-bred cockerel of one of the heavy-laying breeds, but if you have not such, take the best cockerel you have and put him with them in the pen provided for them. Do not let any other male with these hens.

If you are going to breed for market poultry, pick out the largest, plumpest, and best-developed birds in your flock and mate them with a good cockerel. They should have yellow or white legs and skin

If for general-purpose birds, good for laying and market purposes, select medium-sized specimens having red combs—the active, singing ones. The early-hatched pullets are generally the best layers, though not always. Sometimes they take long rests, and when such is the case they should not be allowed in the breeding pens. For the general flock, whose eggs it is not intended to use for hatching, it is far better to have no male bird with them, as infertile eggs will keep sound and good for a long time, while fertile ones are never safe to keep for any considerable time.

S. H. W.

Huron Co., Ont.

In many sections of Western Ontario the snow had entirely disappeared from the fields a week or ten days ago, and warm showers, accompanied by thunder and lightning, have produced conditions promising an early season for spring seeding, while in the northern and north-western counties of the Province heavy snow-storms prevailed after the middle of March and large quantities of snoware yet in sight. The indications are that Manitoba will have a fairly early seeding season; indeed, it was expected that seeding would in some sections be in operation before the end of March, and it is confidently believed that from the heavy rains of last fall sufficient moisture has been stored in the land to ensure a good crop this year.

## VETERINARY.

#### Warts.

A veterinarian contributes the following article on warts and excrescences to an English farm journal, *The Farmer and Stock-breeder:* 

Although the tendency of modern scientific study has been all in the direction of what has not been inaptly termed "the infinitely little"-referring, of course, to the germ theory - it is doubtful if the minor ailments have received their proper share of attention. Those of which we propose to speak are often much more important than would at first sight appear. These are warts and excrescences. In themselves often no more than a subject of merriment among familiar friends, or affording opportunities of practising the more innocent forms of sorcery, these abnormal growths still have a mysterious birth, and not less marvelous method of disappearing in obedience to some charm or nocturnal incantation carried out at the "witching hour of night, when churchyards yawn" andcats upon the tiles do fight, etc. It is absolutely useless to argue with even the least superstitious of men and women on the subject. They have seen or had warts themselves charmed away. In almost every community some individual exists who is believed to possess these miraculous powers, though, if the person in question is asked, he can offer no explanation, and, like the Irish "Whisperer" or the no less gifted Rarey, cannot impart the secret to

In the mystic side of the question, we might venture, at this privileged season of the year, to ask if any readers have known charms to act on animals, whose imaginations cannot well be affected by superstitions? As a veterinary surgeon I have met



Fig.



Fig. II

many claimants to the gift in connection with cattle, but my services have often been called in after their charms have failed.

# WHAT A WART IS.

A scientific definition given in the "Encyclopædia Britannica" is: "A papillary excrescence of the surface, most commonly of the skin, but in special circumstances also of the transitional and mucous membranes." Yes, that is the sort of wart numbered "1" in the figure above, in which I have attempted to delineate a central blood-vessel and very irregular branches. The central vessel is first pushed through from these circulating in the true skin, which must be distinguished from the epidermis or cuticle, which is constituted of layers of scales of material in a state of transition always, being produced and either worn away, as with the manual laborer, or falling off with time, as when the said laborer is confined to his bed and acquires a delicate white hand.

Under that insensitive layer is the trueskin, and it is highly endowed with blood-vessels, whose office it is to keep on producing what may be called natural gloves to bear the wear and tear of each day's work. Up to this point the high-power magnifier in the hands of the physiologist enables us to follow with scientific accuracy the soil in which warts grow, but when you ask the cause there is no satisfactory answer. All sorts of theories have been suggested, and that most commonly accepted by the medical profession is the repetition of some irritating agent or friction to a part continuously applied, although the individual himself may not be aware of it.

If this were so, then those that handle the spade and the broom, the plow and the hoe, would be most frequent subjects, instead of little girls at school. A famous ecclesiastic said, "There are matters we must leave." This is one of them. What we do know is that the said little bloodvessels project themselves through the skin, raising the epithelium, and with it piled up in heaps (it looks under the microscope exactly like a stack of house tiles that have been rather badly used) the vessel proceeds to grow out of the irregular bran-

ches seen in the sketch. The object of these details is to show the reader the necessity of particular treatment, which will be presently gone into. The immense "angle berries" sometimes seen on cattle are of this nature, and there seems to be practically no limit to the size they may grow. I have removed them when more than 1 lb. in weight, and have no doubt many of you have seen them of great size.

Strictly speaking, and from the purely pathological point of view, we have described all the true warts; but we are not hide-bound servants, and we call other excrescences by the name of warts, and sometimes want to know how to get rid of them. There are, for instance, what surgeons call encysted tumors (everything in the way of an enlargement is a tumor in surgical language).

In figure 2 will be seen a solid body inside a space which in the living subject is filled with a watery fluid, and outside that fluid the distended skin. Such warts are found upon the belly and thighs of both horses and dogs. They can easily be distinguished from ruptures, as they feel like nuts inside a bag of water, and can be moved with little pain to the animal.

### TO KILL WARTS.

The method of their growth having been explained, it will be easily understood that radical cure can only be effected by destroying their source of supply. Their tendency to recur is not owing, as popularly supposed, to infection from the blood running over the adjacent skin, but from the fact that any remedy which only cuts the blood-vessel of supply does not prevent it from sending out fresh branches to replace the old growth at or about the former situation. This is the main objection to the ligature, because it is commonly tied too tight, and evers instead of withers the wart. If it is decided to adopt that plan, a ligature should be chosen of rather stouter material than at first appears necessary, and it is better to tighten it in a few days than to put it on too tight at first. From fine to coarse twine the choice may be said to lie, but exceptionally large ones may need tarred cord or some of that thickness. All one has to do is to see that the whole of the growth is included in it, and not be afraid of losing a bit of skin. I am, of course, speaking of the lower animals, though the treatment is identical in man.

In the latter animal ligatures do not so generally commend themselves, as being for the moment painful, and as a rule not necessary. Besides, we can apply a remedy frequently: we haven't to be caught and twitched or otherwise constrained. A bottle of old fashioned black ink will be good enough for us, if we will persevere with it. The iron and tannin willgradually wither upthe vessel of supply if the wart is touched with the cork night and morning.

Many of the large angle berries in cattle are found to be strangling themselves with their own weight, and only need an energetic twist with the hand to break them off. There is nothing to be feared from hemorrhage, although they bleed very persistently at times. The vessel may be stopped by a touch of a red-hot iron or by the application of liquid perchloride of iron.

There are many warts with a diffuse base instead of a neck to be tied, and these must be got rid of with one or other of the various caustics. Among these may be mentioned yellow ointment (a very old-fashioned but effectual remedy), bichloride of mercury, chloride of zinc, sulphate of copper, lunar caustic, vitriol, nitric acid, and others too numerous to mention. The secret of their use consists in preparing the wart for their application. It is very little good applying the strongest of them to a hard, dry surface, from which the liquid runs and the powder drops off almost immediately. The growths need a thorough soaking to open the piles of epithelium. All alkalies have this effect; they make them swell up, and like a sponge, prepare to take up fluid of any other kind.

With a bucket of hot water and plenty of soft soap or a packet of Hudson's extract in it, the wart-killer should proceed and soak the excrescences thoroughly, then rinse with clean warm water, and lastly apply the chosen agent. They can stand but very few such dressings as this, and one is often known to succeed.

It is a farmer's own fault if he sends a beast to market with unsightly warts that depreciate his value, He doesn't need a veterinary surgeon for the job. and the work of removing them will probably pay him a good deal better than many of the things he has to do.

has to do.

The treatment of the encysted wart is the very simplest thing possible—nothing more than squeezing the skin tight over it, making a bold incision with a sharp knife the whole length of it, and another squeeze, and out it jumps. No after-treatment is needed.

## Satisfied.

The William Weld ('o., Limited:

Gentlemen,—I have received the Bagster Bible, for getting two new subscribers for your valuable farm paper, the Farmer's Advocate, and must say that I was most agreeably surprised. I did not expect anything of such value. Please accept my thanks for same, and I will try to put your valuable farm journal in the home of more of my friends.

Harwich, Ont. ROBERT L. JARVIS

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