

owing to the danger arising from a possible passage of the fluid into the lungs through the glottic opening in the mouth. In this way a serious inflammation may be set up. To avoid this when using the medicine in liquid form, it may be administered by means of a syringe, the nozzle of which should be passed beyond the opening in question. A hard rubber syringe though more costly is the better, and the cheaper in the end.

It is also much the best way to administer nourishment in liquid form, such as beef extract, milk, or these combined with a little stimulant; a mode of treatment not to be neglected in very bad cases.

But much preferable to this plan for medicines in either soluble or liquid form are *gelatine capsules*, which can be obtained (by the box) of different sizes. For pigeons the best sizes are No. 0 and No. 00. The latter does very well for fowls although a size larger is sometimes desirable. By this means the medicine is not tasted and not a particle is lost. I regard them as invaluable in the treatment of all animals. The capsule may be moistened and may be then pushed down still more readily.

In applying a powder it is desirable to have the whole deposited just where it is wanted. A simple contrivance which anyone may use is made as follows:—Take a piece of glass tubing about a quarter of an inch wide and eight inches long. Hold it an inch from the end in an ordinary gas flame and when it gets hot enough to bend by its own weight, let it come to a right angle and then withdraw, and hold it steady till it sets. The edges of the ends may be rounded by holding in a flame for a short time. To the unbent end of the tube a piece of rubber tubing may be applied, and after the powder has been deposited in the angle of the bend, and the small end of the tube directed towards the part to be treated, by gently blowing through the

rubber tube (improved by having a little piece of glass tube for a mouth-piece) the powder may be deposited where needed—even blown into the wind-pipe.

Such a method of treatment in certain diseases as roup, canker, etc., is invaluable.

We are greatly in need of more exact observations as to the *dose* suitable for fowls, pigeons, etc.

In the case of birds confined in a coop or cage, more precise observations can obviously be made. It would be safer to assume, as regards fowls and pigeons, that a dose suitable for a child of about nine years of age was sufficient rather than a larger one, until trial had been made.

As a rough classification of diseases helpful to the amateur, we suggest the following:—Febrile (as roup); inflammatory (as inflammation of the lungs); and exhaustive or debilitating, as diarrhoea, dysentery, and "going light" in pigeons.

Before prescribing we must consider what parts are effected, and what organs are still sound and able to do extra work for the disabled ones. Thus at the outset of a febrile affection, like a common cold, since the lungs and perhaps the skin are at fault, act upon the bowels, give a purgative; and in this case I should say let it be epsom salts mixed with a little powdered ginger to prevent griping. Castor oil merely clears our the bowels while the salts are cooling. But in case of dysentery or diarrhoea I would not give the salts, but to begin with a small dose of castor oil, and perhaps three or four drops of laudanum with it.

Again in diseases like roup, in which a vegetable germ is no doubt the cause, and in which prostration is often a symptom, we may depart from the usual rule not to administer iron in febrile diseases, and give tincture of iron and chlorate of potash or quinine and iron pills. When one is in doubt whether to give iron or quinine let the latter be

preferred. It is not likely to do harm at all events, while iron may.

Again in cases where there is a rise in temperature (fever) and rapid pulse the employment of *sedatives* is useful. Among these may be mentioned, bromide of potassium, aconite, veratrum viride, etc. It is better to give small doses and repeat often, thus of pot. brom. 3 grains, of tinct. aconite, 3 drops; of ver. virid. 1 drop every two or three hours till the pulse is slowed or the fever lowered.

Tonics are called for in that large class of affections in which there is deficiency of vigor, slow wasting disease; or in the weakness that follows acute maladies. Among the best are quinine, iron, hypophosphites, tincture of nux vomica, etc.

The moulting season is very trying on thoroughbred birds in confinement and also on pigeons especially when allowed to breed too frequently.

To save some birds it will be necessary to give tonics and it is well to change them from time to time. Giving remedies in drinking water serves a purpose, but is a very uncertain method. It answers for prevention better than for cure. A quinine or quinine and iron pill, (to be bought by the dozen in the druggists' shops); five drops of tincture of nux vomica, given with or without a little cod liver oil in a capsule, is excellent for fowls and pigeons in cases calling for special treatment.

Another valuable remedy to be had ready to hand is Parrish's chemical food; dose from 2 or 3 drops for a cage bird, to half a teaspoonful for a large fowl. I give myself capsule No. 00 full to pigeons. But nothing will save a hen pigeon that has bred winter and summer for two or three years when it "goes light." The latter often means the invasion of tubercle (consumption), and the man that induces it by overbreeding has a serious responsibility to shoulder. This disease is now known to be contagious, though probably not